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DIGITALIS*

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IN studying a drug it seems but natural first to consider the symptoms which it will produce in a healthy man, and then to find in experimental records the explanation of its action. Ten drops of the tincture of digitalis will produce in the ordinary human individual no apparent effect; but when the dose is repeated at short intervals, the pulse soon becomes slower and stronger, the diastolic pauses grow very long, and the individual heart-beat sends a great rush of blood which rises and swells with a power scarcely ever equalled under other circumstances in the pulse. If the administration be persisted in, by and by each pulse-wave may become forked, or, as we say, dicrotic. Then the waves break entirely, until at last a multitudinous pulse, irregular in its size, fragmentary and broken in its parts, with now long, now short, irregular pauses, and perverted rhythm, marks the stage of poisoning. A curious phenomena which can sometimes be seen is a peculiar change in the pulse when the patient's position is altered. Thus, in the man lying upon the bed the pulse may be slow, full, absolutely regular; but when the patient is sat up it becomes dicrotic, or perchance goes into the fragmentary condition just spoken of.

The first point that we make out in studying these effects is, that they are developed very slowly under the influence of the drug, but that when once they are developed they are very persistent; and we learn, therefore, that digitalis is equally slow of absorption and of elimination. Sometimes digitalis seems to have no influence even after many days of steady administration, when suddenly most severe symptoms manifest themselves. It has indeed been denied that this so-called "cumulative" action of the drug ever really occurs; but I have seen it repeatedly. There comes to my mind at this moment the case of a woman who had long been using digitalis without any perceptible effect for the removal of a serous effusion. Sunday morning, her pulse,

which had been at 90, suddenly dropped to 70; although the digitalis was at once stopped; Monday the pulse was 60; Tuesday, it was 50; Wednesday it was 40; Thursday, it was close to 30; and I began to wonder whether there was any bottom. Friday, however, the effect of the remedy began to wear off, the pulse to go back up over the curve, down which it had travelled. The effect of the remedy was very apparent for nine days after the withdrawal of the drug.

The explanation of the cumulative action of digitalis is probably slow absorption and still slower elimination, for certainly the phenomena is especially prone to occur when the drug fails to act as a diuretic. A curious fact which has been repeatedly noted, is the tendency to the sudden development of digitalis action when patients who have been taking the drug are tapped for ascites. The explanation of this phenomenon is, I believe, to be found in the fact that a drug is only active when it is within the circulation. Tapping in ascites relieves pressure from the abdominal vessels and brings about a rapid absorption of serum to fill up the circulation. This serum has contained in it a large percentage of digitalis, inactive because not in the blood; when the serum is taken into the blood the digitalis immediately betrays its presence. It is precisely what is sometimes seen when iodide of potassium is given after a prolonged mercurial course. The mercury inert in the tissues, rendered soluble by the iodide, enters the blood and suddenly shows itself by producing ptialism.

It is evident that the great indication for the use of digitalis in disease is cardiac weakness, and that the action of the remedy should *a priori* be most apparent when a weak, feeble pulse is dependent simply upon a dilated and enfeebled heart. It is certainly proven that the great contra-indication of the use of digitalis is cardiac hypertrophy or excessive power.

In the case of so-called irritable heart, seen frequently in soldiers and sometimes in athletes, cases in which the fundamental lesion is probably exhaustion of the pneumogastric nerves, digitalis seems to be doubly indicated, and very frequently does great good, probably in part by strengthening the nerves of inhibition.

The application of digitalis to the relief of cardiac valvular disease is not so evident. It is neither a rag that shall stop up a leak, nor a needle which shall sew together the fragments of a rent valve.

In some, perhaps many, cases of valvular disease, especially of mitral valvular disease, digitalis may however absolutely reduce the per cent-

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age of leak by notable increase of the force and rapidity with which the blood is driven from the heart; the wide open, smooth, aortic orifice offering no resistance to the powerful stimulant; and there is no increase of friction worthy of note; but the narrow original rent, with its perhaps projecting vegetation, offers great resistance, and the friction rises enormously. I have sometimes compared the blood corpuscles, under these circumstances, to a flock of sheep driven by fright out of the corral; butting and pushing against one another; choking up some narrow outlet; but when the gate is wide open, rushing out in a stream that soon empties the enclosure.

In attempting to understand the value and use of digitalis in valvular heart disease, we must apply what I believe to be the underlying principle of rational therapeutics, namely, to first study the natural history of the disease, see how nature produces relief, and then apply our knowledge of the action of remedies by the same principles of reason by which the worker in inorganic forces adapts his ways to his ends.

Cardiac valvular disease is certainly in a strict sense of the word, incurable; but the principle which I desire to impress upon the young students before me to-night, is, that though nature may be unable to repair an injured valve—even with the assistance of art, nature is often able to so atone for the valvular deficiency that the patient goes on living in comfort perhaps for many decades. Those of you who, in boyhood have had to rise in the early frosty morning and wash from a leaky pump, know very well that the biceps and the triceps must atone for the defective leather, and that if the strokes come fast enough and hard enough the icy stream soon flows freely. It is exactly in a parallel way that nature renders an imperfect heart serviceable, and when the hypertrophy is just sufficient to overcome the valvular defects the circulatory balance is restored. It is extraordinary how complete the combination may be, and how long such a heart may last without causing disturbance.

There has been a widespread belief, which has often found utterance, that digitalis is indicated in disease of the mitral valve, but is contra-indicated in disease of the aortic valve. This belief is unphilosophical and in large part erroneous, although like many a delusion it enwraps a certain amount of truth. Aortic lesions are for the most part gradually developed; and being gradually developed they allow time for the production of a hypertrophy which not rarely becomes more than compensatory. In such a case digitalis increases the distress; but if there be relative weakness in a heart with aortic valvular disease, digitalis is just as important as though the mitral valve were affected. In a large proportion of cases mitral disease has been produced by an acute endocarditis; and then comes the struggle for the heart to build its structure up. Under these circumstances digitalis is a most important remedy, and its use cannot be begun too early.

Just so soon or even before there is any subsidence of the fever and acute processes, digitalis should be used.

I believe, however, that digitalis affects the nutrition of the heart for good beyond the action which has been spoken of. And here I must call your attention to the discoveries of Gaskell, which to my thought have opened new chapters in physiology; and which I believe to exhibit the general basis of functional life. According to this discoverer there are two antagonistic conditions of the heart, one of functional activity and structural destruction, one of functional inactivity and structural repair; the first that which we commonly call the period of activity, the second that which we commonly know as the period of inhibition or arrested function; systole and diastole of the cardiac cycle. The pneumogastric or inhibitory nerve is the nerve of diastole, the nerve which overcomes functional excitement and brings about repair of structure. It is, in other words, a trophic nerve, and I believe digitalis improves the nutrition of the heart not simply by feeding the muscle, nor yet simply by prolonging the period of diastole and allowing more time for repair, but, also, above and beyond these things, by stimulating the nerve which dominates and brings about repair. I think, therefore, that digitalis is to the heart an up-builder, a tonic, a trophic stimulant.

I have so far been speaking to you as to the use of digitalis in the earlier stages of heart-disease; at a time when it must be given in such moderate dose that no danger overshadows its employment; only must I insist that even in these cases that the dose be not fixed or arbitrary, but be that which will accomplish its purpose; you must also see to it that the digitalis is of good quality, for but too often the apothecary serves us evil. I want, in concluding this lecture, to call your attention to the use of digitalis in enormous doses in advanced and desperate cases of heart disease.

Digitalis had simply energized the diseased heart, quieted all its nervous irritability, restored the balance, and enabled it to go on in comparative comfort until the last grain of power in its substance had been used up and death came because there was nothing left. Even if digitalis were the immediate cause of death, was it not better to live a few months of comfort than to die after weeks of agony? The digitalis certainly prolonged, not shortened, the life. In such cases as these the physician is as justified in using the powerful remedy in enormous doses as the surgeon is justified in taking the risk of some major operation when death is otherwise inevitable. Be bold, therefore, in this use of digitalis, but temper your boldness with excessive caution; and remember that you judge the dose not by the amount of the drug but by the effect, and that the dose is not too large until the effect is reached.

I want first to call your attention to certain contra-indications to the use of digitalis in chronic heart-disease.

Of course, one of the greatest difficulties that overshadows or encumbers our use of digitalis is its tendency to disagree with the mucous membrane of the gastro-intestinal tract, and of course, therefore, any irritation or irritability of that mucous membrane is a contra-indication to the use of digitalis.

But the special contra-indications which I shall dwell upon are much more hidden and less easily perceived and understood. Indeed, the first contra-indication took me fifteen years before I fully comprehended the force and power of it. I soon learned in my practice of medicine that there was a set of cases of mitral insufficiency in which the heart-power is not equal to the heart-work and in which, therefore, digitalis seemed to be indicated, but in which digitalis evidently adds to the cardiac distress, and in which so far from its doing good it added so much of harm that I was of necessity forced soon to avoid giving it. It was long before I thought out the explanation of these cases, but, like Columbus's egg, when once the problem is solved it is quite simple. In all these cases I noticed that there was a very large insufficiency of the mitral valve; and I have no doubt that under these circumstances there was also a great weakness of the left auricle. Now, if there be an excessive weakness of the auricle, and digitalis enormously strengthening the power of the ventricular contraction drives the blood with great force upon the auricle, though there may be gain so far as the ventricle is concerned, there may be such stretching of the weakened auricle that the strain is too much for it. The cardiac agony which follows in these cases the use of digitalis is the measure of the output of a weakened auricle which cannot resist the backward pressure from the increased ventricular power. After I had worked the problem out to my own satisfaction, my reasoning was abundantly confirmed by the curious experiments of Kaufmann, who found that digitalis has much more power over the ventricle than the auricle, increasing the intra-ventricular pressure during contraction much more than the intra-auricular pressure. A weakened auricle with a widely opened mitral valve is in verity a very important contra-indication to the use of digitalis.

I have talked to you regarding the peculiar pulse-wave of digitalis. It is a mighty tide of blood which rushes through the artery with great power and force, swelling and dilating everything as it goes; and the great danger in the use of digitalis in aneurism is the fact that we have not merely increased lateral pressure but an increased wave, that, rushing through, must distend, must tear, must rend, must sweep out edges of clots, and find its way back of the clots that protect the coats of an aneurism.

I want, next, very briefly to call your attention to the employment of digitalis in acute disease. Suffice it for the present to say, that in my belief whenever you have syncope, failure of heart's action from any cause, digitalis, though not the

most rapidly acting is the most reliable of all drugs that you have; and though we employ ammonia and alcohol under these circumstances, and employ them very properly for their momentary effect, digitalis should be always used and used freely. You may give it under these circumstances hypodermically; there is no use of giving it by the mouth. You use it hypodermically, and may use it without fear. At least, I have given it so that the whole skin seemed full of it; and I have never seen any bad effects from it, except perhaps some ulceration.

Digitalis is a useful drug in all cases of the heart's failure in acute disease. Unfortunately, for reasons that we do not fully understand, it does not serve our purpose in certain cases in which we most need it. It fails us usually in cases of fever, and that has been shown by the researches of Lauder Brunton to be due to the high temperature which overcomes the action of digitalis in some way we do not understand.

The dose of the tincture is put down from five drops to ten drops, and that of the infusion is put down from a drachm to one-half a fluid ounce. The infusion is only ten times weaker than the tincture, and five drops of tincture of digitalis is only equal to about thirty drops of infusion, because the tincture drop is small. And right here let me say I think it is much better and safer in the case of this tincture always to give it by minims, especially when you are giving the drug freely.

THE PHYSIOLOGICAL AND MORBID RELATIONS EXISTING BETWEEN THE UTERUS AND THE EYE.

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ONE of the fruits of legitimate and honest work in special lines of medical and surgical practice is to develop their mutual relations; to show where these lines merge or intersect each other; and to furnish curative resources that no single school of specialists could have discovered and made available. If this fact were remembered there would be less friction, for not only would the pursuit of one branch of study and practice be a check upon the crazy and exclusive reliance upon another, but the interest of one would become the interest of all alike.

There is, perhaps, no better illustration of what I shall venture to style an inter-special reciprocity than is to be found in what has recently come in a clinical way of the associate work of the gynecologist and the ophthalmologist. Every observing physician has seen cases in which for some unknown reason the eyes and the vision have become involved in the various uterine and ovarian disorders. In former times we first treated such

* Read before the Clinical Society of the Hahnemann Hospital of Chicago.

cases in a general way, then, when they had drifted into an unmanageable state, sent them to the oculist or to the gynaecologist, according as either set of symptoms predominated, or to whichever of these two specialists was most convenient, friendly or experienced. After which, if they happened to work in harmony, as men who are aware of their mutual relations and responsibilities should do, all might be well, but if not, whatever benefit accrued to the patient was purely accidental.

Fifteen years ago an arrangement was entered into between my worthy colleague, Professor Vilas, and myself, for the mutual study of such compound cases as came within the range of our observation. Occasional reference has already been made in this society to the result of our labors, and at this time we have thought best to call especial attention to the subject as one that is likely to interest the general practitioner. The time is all the more propitious because of the recent appearance of two extensive monographs upon this subject.* It is a pleasure to state that in the main the conclusions arrived at by the two authors corroborate our own. The exceptions will be given you by Dr. Vilas, and it only remains for me to summarize and to emphasize the clinical contents of these two books.

Concerning the morbid relations that exist between the eye and the uterus, Dr. Janot bases his work upon the following conclusions, each of which should be carefully considered:

1. Certain ocular troubles exist in relation with different physiological and pathological conditions of the uterus.
2. In order to institute an efficacious treatment it is important to establish their origin.
3. These ocular lesions are much more tenacious when the uterine troubles have persisted for a long time.
4. In a large share of cases they are attributable to infection.
5. The treatment should be addressed to the local condition of the uterus and the vagina, to the local state of the eye, and to the general condition of the patient.

After stating that this publication was supplementary to that of S. Cohn (1890), the only separate work that has been published upon this subject until now; and that it would be limited to the direct relation between the eye and the uterus, omitting such special diseases as albuminuria, Graves' disease, hysteria, etc., as well as that it would especially consider the *role* of infection in this form of ocular troubles, the author proceeds to develop his thesis in a very careful and practical way. The points are illustrated by detailed cases, of which there are *eighty-seven*, that are derived from various authentic sources. The bib-

liography furnishes a list of 104 papers, reports of cases, etc., that have already been published in various languages.

During Menstruation.—Frankenstein based these conclusions upon the study of twenty healthy women during menstruation whose ages ranged from 19 to 33.

(a) During the period there was a narrowing of the visual field; (b) this diminution began two or three days in advance of the flow, attained its maximum at the third or the fourth day, and diminished little by little until the seventh or eighth day of the period; (c) this narrowing of the field of vision varied in different persons, being more decided in those who had malaise, headache, palpitation and other nervous symptoms, or in whom the loss of blood was considerable; (d) it existed not only for white but also for green, red and yellow; (e) in twenty per cent. of these cases the sense of color was deranged during the whole period for green, which was designated as yellow; (f) the central acuteness of vision was only slightly affected and became normal with the cessation of the flow; (g) the refraction remained intact.

It is not rare for the return of menstruation in otherwise healthy subjects to be accompanied by eczematous and herpetic eruptions upon various parts of the body, hordeolum, blepharitis, and kerato-conjunctivitis. Rausohoff reports the case of a woman, *æt.* 28, who suffered at each menstrual period from an affection resembling herpes of the cornea of a tropho-neurotic nature. Although normal menstruation seldom affects the retina or the optic nerve, Leber reports a case of acute papillitis with hæmorrhage of the retina which was directly related to the catamenia. Inflammations of the uveal tract are more frequent because the iris and the choroid are most intimately related with the uterus. This latter fact is emphasized by the increased tendency to eye affections in dysmenorrhœa and other menstrual disorders. Numerous cases are cited to show that existing lesions of the eye and of vision may be greatly aggravated by the return of menstruation. In the case of iritis this monthly aggravation is sometimes very pronounced. Trousseau was the first to describe the catamenial form of irido-choroiditis and to demonstrate its relation with the menstrual infection. Indeed, until his thesis was published in 1890, the etiology of ocular affections of all kinds was ascribed to congestion and anæmia, or to one of the diatheses, as rheumatism, scrofula, syphilis, etc. DeWecker (1891) first described the metritic iritis.

At Puberty.—The ocular lesions incident to puberty are numerous and varied. For six weeks prior to the first appearance of the menses a young girl was blind every morning, but the trouble disappeared entirely with the coming on of the flow (de Boismont). Ourset reports a case of hydrophthalmia that was induced by precocious menstruation. Under such circumstances

* "Contribution à l'étude des Rapports Morbides de l'Œil et de l'Uterus. Œil Uterine." Par le Dr. CHARLES JANOT, Paris, 1892; et "Les Manifestations Oculaires de l'Hystérie—Œil Hystérique."—Par le Dr. P. PANSIER, Paris, 1892.

the loss of vision may occur insidiously, without orbital pain or any evident sign of inflammation, and yet the ophthalmoscope may detect a serious lesion. Dor cites the case of a young girl who at the beginning of her menstrual life had double hæmorrhages into the vitreous humor, which came and went at intervals until the menses were regularly established, when the intra-ocular hæmorrhage and the amblyopia disappeared entirely and did not recur. DeWecker is of opinion that when the iris only is affected the inflammation takes on the serous form; and Galezowski attributes the atrophic choroiditis of these subjects to the lymphatic and strumous diatheses.

The optic nerve is rarely involved at puberty. Our author has been able to find but two cases of optic neuritis in this class of subjects. In one of them, published by Leber, the nerve was atrophied, and in the other, reported by Oursel, the patient recovered. The conjunctiva, the cornea, and the uveal tract are most often implicated. But, occurring at this important epoch in the life of woman, these lesions have different degrees of severity, and are tenacious in proportion to the difficulty and the delay in the establishment of the normal menstrual function. They are either very much relieved or entirely disappear when that crisis is past.

At the Climacteric.—The eye symptoms and suffering incident to the menopause are better known, but are not always thoroughly appreciated. They include orbital pains, photophobia and lachrymation; while the accompanying inflammation is limited to the uveal tract. Again the eye becomes glaucomatous, with a strong and painful tension that necessitates prompt intervention. The crystalline lens is cataractous; the painful crises are very tenacious and recur periodically. (Dehenne). Sometimes the glaucoma develops without concurrent symptoms, takes an acute form and is quickly remedied. Pargoire cites a case that yielded promptly to a colliryum of eserine.

Next to the uveal tract the optic nerve is most often affected. The lesion presents itself in the form of optic neuritis, which may either disappear without leaving a trace behind, or terminate in atrophy of the papillæ. Galezowski holds that we may have it under three forms: (a) of neuroretinitis, either mono- or binocular, but followed by an obliteration of one or more retinal vessels; (b) of neuritis, with inflammation that is limited to the optic nerve of one eye; (c) double optic neuritis that may end in atrophy of the papillæ.

During Pregnancy.—Besides albuminous retinitis, the significance of which in connection with pregnancy is appreciated by the accoucheur and by the profession generally, there are other ocular troubles of this period that should not be overlooked. Santesson reports a case of amaurosis which repeated itself in several pregnancies; and Portal, one in which a woman became blind in her first pregnancy, deaf in her second, and mute

in her third. Several authors have quoted cases of temporary blindness during pregnancy. Jobert cites five varieties of polyopia, in each of which, except one, the woman had twins, and in the exceptional one, triplets. Blodig notes a case in which strabismus came and went with such regularity as to constitute a sure sign of pregnancy.

Hæmeralopia toward the end of gestation, hæmorrhage into the crystalline lens, and detachment of the retina without retinitis or albuminuria are not infrequent. T. Metaxas gives the following list of the eye lesions possible during gestation: (a) Ulcers of the cornea, which are usually central, develop slowly, and are painful but not dangerous. There is very often chemosis and hypopion; (b) accommodative asthenopia, which occurs in those who are hypermetropic; (c) hæmorrhagic glaucoma; (d) miliary aneurisms (Galezowski); (e) amblyopia and amaurosis without appreciable lesions; (f) scotomes and hemiopic symptoms that are purely nervous, without alteration of the ocular membranes. To this list Janot would add polyopia, strabismus and hemeralopia.

We see, therefore, that, in addition to the lesions caused by albuminuria, ocular troubles are frequent among those who are pregnant. They may be very slight and disappear with delivery, but they sometimes end with complete and permanent loss of vision. In view of this latter possibility, Lor is of opinion that the induction of premature delivery may sometimes be justifiable, as it is in case of serious albuminuria.

In the Puerperal State.—The eye troubles incident to labor are referable to the cerebral congestion that is caused by the struggle and the strain of delivery. When not associated with confirmed Bright's disease they are usually self-limited. But the opposite is true, however, of the early post-partum period, in which this class of troubles are developed some hours after the expulsion of the placenta, directly after a severe hæmorrhage, or possibly some days after delivery. All parts of the eye are liable to be affected, and the lesions are various. Amaurosis, which may be entailed from pregnancy, or which may happen after successive labors, and which is not always associated with renal disorder, is frequent. Szily reports a case in which four days after labor, on having the window of her darkened room opened suddenly, a woman became blind. The ophthalmoscope showed no lesion; the trouble lasted for six weeks and disappeared, the patient's room being darkened and she gradually accustomed to the light again. Where blindness is incomplete, hemiopia from embolism of the central retinal artery, or one of its branches, is not uncommon. Sometimes this lesion is preceded by a violent fever, partial aphasia with loss of memory for the names of objects, and other cerebral symptoms, which symptoms may disappear although the eye mischief remains.

These puerperal eye troubles are remarkable for their persistency. Not only may we fail to

cure them, but often there is no relief for them; and sometimes they become very complicated. Nagel found a lying-in woman who became blind four days after delivery with characteristic signs of embolism of the central retinal artery. There was contraction of the arteries, pallor of the papillæ and a cherry red spot, without any cardiac lesion. Later on there was detachment of the retina. Retinal hæmorrhages often accompany this embolism, and their cause is confirmed (as it was by Litten in six of his cases) by finding bacterial infarctus and abscess in the lungs and other organs.

This propagation of pathogenic germs, which penetrate the uterine wound and are carried to the eye, may cause an inflammation of the uveal tract, which, in fact is the part of the eye that is most susceptible to uterine involvement from the entrance of septic germs into the organism.

Iritis, irido-choroiditis and sclero-choroiditis are also common.

The characteristic of all of the diseases of the eye in childbed, including optic neuritis, is that they are septic, infectious, and secondary upon the uterine lesions and accidents that follow labor, whether premature or at term, and whether normal or abnormal.

In puerperal pyæmia it may happen that secondary abscess shall form in one or both eyes and the organ be thereby destroyed. A few years ago I saw a case in consultation with Professor Vilas and the late Dr. Hall, a very sad case of the kind, in a primipara in which the globe of the eye burst and was discharged.

In lying-in women who are a prey to the worst consequences of the purulent diathesis one or both the eyes may be attacked with hyperæmia, which does not result from the ordinary causes of ophthalmia, but from a general cause. First there will be a blepharo-conjunctivitis to which the sinking of the eyes and their being buried in the orbit gives a peculiar appearance. The look is troubled, but without expression, and the patient rarely has any idea of ocular disturbance. Sometimes the cornea is sunken, faded, loses its tension and its usual brilliancy. In certain cases there is photophobia and lachrymation. Like the cornea, the iris may have a changed look, in which case it may partly lose its habitual color. I have several times seen a hypopion form, and the level of the purulent liquid would reach to a considerable height in the anterior chamber. (Hervieux, "Traité clinique et pratique des Maladies Puerperales.")

Disturbances of vision are also frequent among nursing women. An amaurosis, more or less complete, at times accompanied by hyperæmia of the conjunctiva, is especially common. Eastlake observed this amaurosis in eight successive confinements of the same woman, attended in each instance with total loss of vision supervening on the third day. This patient was subjected to the examination of skillful ophthalmologists,

who were unable to demonstrate any alteration whatsoever in the transparent media, or upon the retina. The sight generally returned in from three to five weeks. Cuvier and Sichel have observed the sudden appearance of amaurosis during delivery, and a second case in which no improvement took place during childbed. (Winckel "On Childbed.")

In Amenorrhæa.—Of the pathological states of the uterus as distinguished from the physiological, the disorders of menstruation have a most decided influence upon the eye. Thus amenorrhœa is a frequent cause of amaurosis, which usually ceases when the flow is regularly established. (Demours.) One of the forms of vicarious menstruation is the shedding of tears of blood. Cohn reports a case in which the menstrual hæmorrhage came from the angles of the eye, and sometimes from the jaws, the nipple, the hand, and even the ear, the stomach and the nose. Intraocular hæmorrhage, and hæmorrhage into the anterior chamber may also be due to menstrual retention. Amblyopia from amenorrhœa is rare, but a case is reported by Kohn. Oursel relates a striking case of myopia that was aggravated by a suppression of the menses.

Inflammatory affections of the eye from this cause, are, however, more common, especially in scrofulous subjects. Phlyctenular and granular conjunctivitis, with or without eczema and glandular swellings, are familiar incidents in amenorrhœa. Daguenet cites a case of keratitis of the two cornea following a brusque arrest of the menses that ended in suppuration. Mooren reports an interstitial keratitis of both eyes that did not suppurate, but which persisted despite the treatment. When his patient was examined she had already had the trouble for thirteen years with a marked exacerbation every four weeks. Some improvement followed the bringing on of a slight flow by the use of emmenagogues, but there was no cure for it. The deeper parts of the eye do not always escape this secondary mischief, for the uveal tract, the retina and the optic nerve may also suffer.

The hæmorrhage into the retina may take on different forms; sometimes it is in spots and again it spreads. It often provokes a sanguineous effusion into the vitreous body. This more or less severe effusion interferes with the use of the ophthalmoscope and prevents a recognition of the retinal hæmorrhage until after its absorption. Then we may find hæmorrhagic spots that are seated about the macula without changing it, and without invading the optic papillus. So far as vision is concerned it causes amblyopia, which, if the effusion of blood into the vitreous body is considerable, may finally result in total blindness. When the effusion is lacking, or has been absorbed, there are scotomæ. An interesting peculiarity of this retinal hæmorrhage is that it usually involves but one eye.

The detachment of the retina under these conditions is so rare that but two cases are cited, one

by Pargoire and the other by Pflüger. Optic neuritis is accompanied by violent headache from the beginning, and the vision usually disappears rapidly. In one of Christensen's cases the blindness was complete in an hour. The prognosis, however, is not always unfavorable, for the atrophy may be only partial and the remaining vision may be sufficient. In Meyer's case, although the visual acuteness was reduced one-third, it returned to the normal and the fundus of the eye showed no trace of a lesion. Machek observed one case in which there was a complication of retinitis and of disseminated choroiditis that was followed by a complete cure when the menses were re-established.

Thus far we recognize that the lesion may be seen, for it extends as far as the papilla where, by the aid of the ophthalmoscope, we can recognize the hyperæmia, the œdema and the change of color. But we may infer that it is possible for the inflammation to be limited to the intracranial portion of the optic nerve, and even to cause amblyopia or perfect blindness. This affords the best explanation of some cases which certain authors have mistaken for amaurosis. Such a passing inflammation does not result in atrophy of the optic nerve, and disappears when the menses return.

In a case noted by Skorowski and Kofminski the amaurosis lasted for six days. Both eyes are not always seized. Brown reports one in which the left eye was affected along with hemiplegia. After six months vision was completely restored.

In Dysmenorrhœa.—The most important ophthalmic lesions that are secondary upon dysmenorrhœa are conjunctival ecchymosis, which is very rare; conjunctivitis; choroiditis; scleratitis; keratitis, ulcerative or vascular; iritis, serous, cachectic, single and double; inflammation of the uveal tract; asthenopia, accommodative or muscular; oculo-motor paralysis (Joachim) and retinal hæmorrhage.

The retinal congestion may be the sole morbid symptom resulting from the dysmenorrhœa and subsiding without any serious consequences; but it may happen that hæmorrhage will result from a lack of resistance on the part of the vessels. We shall see that the septic germs may so alter the vascular walls as to facilitate their rupture. It is in this way that infectious materials brought by the blood current from the uterus to the eye, may, if their influence is feeble, provoke a congestion only; while if it is very strong, may cause a rupture of the vessels and a consequent hæmorrhage. The most frequent eye affections associated with dysmenorrhœa, however, are iritis and choroiditis.

In Abortion.—In abortion the eye involvement is almost certain to be the result of infection.

Not only is the introduction of septic germs into the current of the circulation favored by the uterine wound, but also by the atony of the uter-

ine muscular fibres. These contract less firmly and more slowly than after delivery at term, and the open mouths of the vessels offer an easy ingress to the micro-organisms.

Admitting the possibility of infection as a cause of certain diseases of the eye, as for example, iritis and irido-choroiditis, in a given case, where could these germs have originated? In spite of the fact that women sometimes have an interest in concealing the truth, it will not be difficult to refer the lesion to its proper source. It is therefore necessary that the physician should be aware of their etiology if he would treat these diseases successfully.

Chronic Uterine Affections.—The neck of the uterus is continually in contact with the vaginal secretions, a condition that is quite favorable to the development of certain micro-organisms. Through its erosion, or ulceration, the septic germs very readily find entrance into the blood current. The same is true of epithelial exfoliations of the cervical and corporeal endometrium.

Retinal hyperæsthesia is often induced in a reflex manner by dragging, pressure, and displacement of the uterus. Cohn and Moren report cases of the kind in some of which repeated pregnancies aggravated the lesion through increasing the uterine deviation. We have noticed the same condition as a concomitant of old perineal ruptures. Rouquette cites instances in which photophobia was dependent upon metritis, anteversion and retroversion. Mooren had a case of retroversion in which after coitus the eye-suffering was always aggravated.

The optic nerve may be inflamed but is not likely to become atrophied. The chief ocular lesions in chronic uterine cases are those which are incident to the menstrual disorders, as amenorrhœa and dysmenorrhœa, which have already been considered. According to Litten the most frequent of those which accompany uterine cancer is retinal hæmorrhage. It may happen that the eye will be attacked, although the cancerous lesion is limited to the cervix, while if it invades the body of the womb the eye may possibly escape. He ascribes this ocular involvement to the anæmia of advanced cases, but it is doubtless true that uræmia and malignant infection should also be added to the list of causes.

Concerning the infectious source of the diseases under review this book is full of suggestions. Trousseau, to whom we have referred, first described the catamenial iritis. He reports other cases in which the patient's eyes were healthy after labor so long as the vaginal irrigations were continued, but when their use was suspended the eyes soon became infected. At the moment of menstruation there is a true uterine wound which, being in constant contact with the germs, may excite a metritis and their transference to the eye. Truc calls attention to similar conditions incident to abortion which will not respond to treatment until the uterine wound is healed. De Wecker is very emphatic: "In fact," he says, "we may con-

clude without fear of contradiction, that all cases of iritis of whatever kind are of infectious origin, and that every person who suffers from it should be guarded as if he had an infectious disease."

This is too sweeping a statement no doubt, and our friends the oculists will correct it by showing that, while iritis and other utero-ocular lesions are often, and more often than has generally been supposed, of infectious origin, the old theories of their causation should not be altogether rejected. For they are, and will always be deserving of consideration.

As already stated, I have long been satisfied of the clinical importance of the relation between chronic diseases of the uterus and the eye, and that the most sensible and successful way of curing them was to take both sets of factors into account. Here is an extract from one of my hospital lectures, delivered some years ago:

A considerable proportion of cases of endocervicitis are characterized by impaired vision, or rather by weariness of the eyes and inability to use them. This is true not only of inflammation of the cervical mucous membrane, but of other diseases of the neck of the womb, and perhaps of the ovaries also. For there is an inexplicable sympathy between the inferior segment of the uterus and the eyes. I have treated a case of incipient amaurosis which was entirely and promptly relieved by the removal of a small mucous polypus that was found hanging from the external os-uteri. Women have in almost numberless instances complained to me of pain, aching and weakness of the eyes immediately after the application of even the mildest lotions directly to the cervix. It is not at all unusual for this symptom to follow copulation temporarily, and in case of immoderate indulgence of the sexual appetite, to become chronic and perhaps incurable. The patient before you had these symptoms in a marked degree, and just in proportion as the uterine irritation and inflammation have been relieved in her case, have the weakness of vision and its attendant symptoms improved.*

What is said of the diagnosis of these allied affections is so very practical and expressive that we cannot forbear another quotation from Janot:

In the great majority of cases it is easy to find the original cause. The patients themselves direct our attention to the condition of the womb; for they are often struck by the periodicity of these affections and their relation to the menstrual return. This periodicity is often significant at puberty as well, and even when the flow has not yet appeared.

But these signs are sometimes lacking. The ocular lesion may persist in the intervals with aggravation at the month, in which case we must verify the uterine involvement by a local examination. Thus we may often find that the womb is

concerned in the difficulty when it had not been suspected that such was the case. With young women who are free from syphilitic and rheumatic antecedents we may find an excoriation with suppuration of the lips of the cervix uteri.

If the patient desires to conceal the true state of the genital organs the diagnosis is more difficult. The case reported by Prof. Truc was one of plastic irido-choroiditis following an induced abortion. He was forced to push his inquiries to the end of obtaining all the facts because he was satisfied that the iritis was related to a uterine lesion.

It is comparatively easy to distinguish these troubles from such as are caused by syphilis and rheumatism. The patient's antecedents and co-incident suffering are suggestive, but since both sets of causes may be in operation they do not always absolve us from the necessity for a vaginal examination. We have often seen cases in which patients had iritis and irido-choroiditis with rheumatic pains that were complicated with menstrual troubles, and which could not be relieved until the menses were regulated.

When the eye ailments result from blenorrhagic infection the diagnosis is more difficult. That this cause may induce iritis is shown by Prof. Truc who has reported an irido-choroiditis in a young man with subacute rheumatism and acute gonorrhoea. We should therefore remember the presence of the gynecocci in the genital organs. In some cases only the bacteriological examination of the vaginal discharges could settle the diagnosis, but usually there can be no doubt of the presence of the infectious element. In the case of virgins the result may be charged to the microbe of ordinary suppuration.

The prognosis turns upon the diagnosis. Having determined the uterine origin of the eye trouble, the nature and clinical significance of the cause is an essential factor in foretelling the course and result of the secondary affection. The ease and facility with which the disordered menstrual function can be remedied and its healthy performance restored; the possibility of curing an accompanying disorder of place or structure in the uterus itself; the time of life, the limited condition of puberty, gestation, puerperality, lactation and the menopause, are qualifying conditions that need to be studied very carefully. Briefly, however, the prognosis of ocular lesions of uterine origin is serious, for it often happens that they do not disappear when their peculiar cause has been removed.

Finally, the local treatment for the eye and that for the uterus should in many cases be the same as if each affection was single and primitive. When, however, there is reason to believe that the double mischief depends upon some form of uterine infection, the indication is for intrapelvic antisepsis, the technique of which is familiar to the members of this society. Menstrual arrest and derangement, as well as uterine deviations, laceration, congestion and ulceration should be regulated and remedied by medical and surgical

* Lectures Clinical and Didactic on the Diseases of Women. Sixth edition, page 458.

means, the eye being treated meanwhile as local circumstances may require. The constitutional remedies in our school of therapeutics especially, can very often and indeed usually be suited to both sets of symptoms at one and the same time. But this opens so vast and important a subject that I must close with the hope that one of our number will favor us with its development, and also with the remark that the review of the second book on my list must be deferred.

Discussion.—Dr. Vilas.—Those of us who are familiar with the labors of Dr. Ludlam in his specialty will not be surprised at this remarkable paper. This is a most difficult subject to write upon. Any one who has heard the names of the diseases alone which have been given would feel very much as students often do when first they attend lectures on the eye. Those who have listened to lectures from me may have noticed that I always begin the initial lecture with the statement that in the eye and its appendages may be found a portion of every component of the human body, and for that reason it becomes a most important study of the course.

I am sure you will agree with me, after this paper, on the importance of such study; and I surely hope that its author will give a review of the other book at an early date. A paper of this sort is so complete that it is impossible for any one to speak upon it without a thorough and careful study of its detail. There might be some points which could be elaborated by the ophthalmologist were time given. When Dr. Ludlam spoke of the asthenopia found in connection with the displacements of the uterus, I thought it a good time to emphasize the fact that this relation does not receive sufficient attention from the general practitioner.

We might also speak particularly about the metastatic choroidal abscess which was touched upon. When the Doctor reviews the other book with his next paper, which I hope will be very soon, I think the whole should be published in pamphlet form; it would be most useful to all branches of the profession.

Patients are sometimes a little surprised if questions are asked by the oculist that refer to the organs remote, and seemingly not connected, but for a number of years I have put great emphasis on the fact that no man could be a good oculist unless he was a good general practitioner as well. I would like very much indeed to have more time, and would like to study this and its companion paper. I am sure that our records can add more and similar cases that have been seen during our joint service of the last fifteen years. I hope we may have some suggestions from some others. I feel abundantly repaid for coming this evening, and thank Dr. Ludlam for all the labor he has taken in our behalf.

Dr. E. S. Bailey: I have been very much interested in the reading of this paper, for I have known of some instances in which the lower seg-

ment of the cervix seemed to have a very marked influence on the vision of the patient.

I have in mind a class of cases that I think have a large influence upon the general system, sympathetic system largely, and secondly the cerebro-spinal system and following that the nerves, the spinal sense, and that is the class of cases of hyperplasia of the uterine tissues; and the second the uterine displacements. A case that is fresh in my mind to-day illustrates the latter part of it, and that is a patient suffering first with a severe form of retroversion in which the fundus rests upon the rectum. I noticed that with the beginning of her uterine trouble she had a failing vision. She suffered from this for twelve years and has had a number of physicians during the time. Repositing the uterus relieved a good many of the pelvic symptoms and finally the eye symptoms. Following the condition of retroversion, came on the condition of acute anteversion with the cervix resting upon the rectum to a very large extent, interfering with the vision, so much so that the oculist thought it a case of amaurosis and performed two operations for its relief. The patient drew attention to the fact, that always when she was suffering from the severe form of uterine displacement the eye symptom was prominent.

I think this a good time to insist that the subject be ventilated further. I believe it of very great importance that the eye symptoms be studied with those from the uterine lesions, and I have learned a good deal from the reading of this paper.

Dr. Skiles: I have listened with a great deal of satisfaction to the reading of the paper. For several years it has been my habit the first thing when I saw a patient, to examine her eyes, and often I have found the cause of the eye trouble in the uterus and by relieving this, the eye trouble was also relieved. I recollect one case which I sent to Prof. Vilas. When she was fourteen, he fitted the eyes with glasses for hypermetropia, and before she was eighteen he changed her glasses three times, making them stronger every time. At eighteen the father reported that she could not see; she could not tell whether it was her mother or some one else's mother in the room. I asked for an interview and upon questioning her, I found that ever since she could remember, she had had a continued leucorrhœa. I told them it was due to endometritis, and when that was relieved her eyes would be all right. I dilated the uterus and wiped it out with cotton and to my delight in the morning she could see her mother. This has been my habit for several years, that when these cases are treated I place them in a dark room. Whether this is correct or not, we had the result. The way that I came to do this: I had a friend who treated a case of this kind and the patient was so delighted that the eyes were cured and acute inflammation of the eyes disappeared.

I do not know how I can emphasize the value

of this paper; I do not believe that we can fully appreciate it until we have read it carefully.

Dr. C. J. Swan: I quite agree with those who have previously spoken in regard to the value of this paper, especially in regard to having it printed, as I believe it will be the first pamphlet published on this subject in the English language. I was informed beforehand that this essay was to be read, and have made an effort to find something upon the subject. I looked over my own books and spent several hours in the Newberry Library for this purpose; but the meagreness of the literature upon this topic is something to cause surprise.

In looking over my notes taken last winter in the clinic of Prof. Fuchs, of Vienna, I found a case of amenorrhea, with hæmorrhagic retinitis that will come under this head. A young woman, twenty-four years of age, came to the clinic complaining of a periodic amblyopia. Ophthalmoscopic examination showed bilateral hæmorrhages. It was found that these hæmorrhages would be reabsorbed in three or four weeks, but would recur at every menstrual period. The outcome of the case I was unable to learn, as she was sent to another clinic.

There was also a case of trachoma with pannus, in a young peasant girl, that seemed to do well under treatment until the menses came on, when the disease would again assume all its former virulence.

Dr. W. H. Burt: I have been very much delighted with the paper this evening, and find that it opens an entirely new field for us. I would like to relate one case in point, for in my practice I have had many confirmations of these cases. I had one patient who gave me great trouble, a young lady, about eighteen years of age, with deep heavy pains in the eyes all the time, and during the menstrual period always having a sick headache. I felt satisfied in my mind that I had a case of some optic trouble, and therefore sent her to Professor Vilas, but the result was that the doctor said there was nothing wrong with her eyes. She had female trouble, and not being willing for a man to treat her she went to Mrs. Dr. —, and was treated in the routine way for about two years, but remained a physical wreck all the while. Then she had to give up school, and I commenced treating her. A man then came along and married her, and I felt very sorry for him at the time, thinking that he had ruined his life forever, as well as her's. In a short time she became pregnant, and was delivered of a nice child, and is now a perfectly healthy woman. Now I see that Dr. Vilas was right. He could not find any optic trouble, and it was probably reflex from the uterus.

Another woman had terrible convulsions, and remained partially blind for six months. If she could have a light in the room she was all right, but if the light was out she would go insane. In about six months she got over that entirely.

Only yesterday I had a case similar to Dr.

Bailey's. She had had this for about six years and one eye was almost lost. I replaced the uterus yesterday, and of course have not heard the result. I have been more than paid in hearing the essay of the evening, and am sure that it will bear a great deal of study.

Dr. Skiles: I would like to ask Dr. Vilas if in these reflex cases he can see anything abnormal with the ophthalmoscope?

Dr. Vilas: Yes, in some of the cases, but generally not.

Dr. Skiles: A case that I treated about a week ago of almost complete blindness, except that at the right side there was just a ray of light in the right eye, and now she can see an object at about forty-five degrees. She had been thoroughly examined by oculists, and they pronounced the eye perfect. I would like to ask Dr. Vilas if the deeper part of the eye showed anything by which the trouble could be diagnosed?

Dr. Vilas: I could not say without examining the case, whether they did or not. That could be answered only with the ophthalmoscope.

People are apt to think and speak of the eye as a separate thing, entirely disconnected, as though it could be mailed by express, treated and sent home. They do not seem to think of it as connected with the body. I have been working a number of years on the subject of the relation of the eye to the general system, and some day I hope to publish a monograph on this important subject.

Dr. Wesley A. Dunn: This is a pet subject of mine, and is a matter of the relations of the organs to the body. I chose for the subject of my inaugural address as president of this society, "Is a Specialty Possible?" and took the ground the special study of an organ alone is not possible. I believe that to be a good specialist you must be at first a good general diagnostician. I started out with the idea that I would treat nothing but the nose and throat, and thought I could tell all about the nose and throat by looking into them. But I soon learned that often I was treating the wrong end of the body, and in many cases saw only the tail end of the symptoms when I observed the nose and throat.

So it is with all the organs and the specialties. One cannot be a specialist without first being skilled in general diagnosis. This is a foundation of all things, and without making a general diagnosis it is impossible to effect a cure. This is true in every specialty, and those who say they will not look beyond the eye, nose or throat, are the ones who are getting left.

Dr. Ludlam closed the discussion with thanking the members for their expression of interest in his report. It was designed to bring their attention to something useful, not only in a diagnostic, but also in a curative way; and not only to a specialist, or to two sets of them, but also to the general practitioner. The frequency of utero-ocular troubles will be conceded, and I am sure that many of our physicians have seen them and treated

them more or less skilfully and successfully, but unwittingly, without having recognized their clinical kinship. And what is true of the lesson in this case as between the oculist and the gynecologist is, I take it, true of the mutual relationship of all the other specialties that really deserve the name. When rightly practiced they are not independent but interdependent; and I have no sympathy with those who doubt if their cultivation will do us any real good.

Taking the clinical hints as to causation contained in our paper, supported as they are by objective and tangible facts, as a starting point, and turning to our *materia medica*, what confirmation do we not find of the morbid relation between the eye and the uterus? The provings of belladonna and pulsatilla and many other remedies are exceedingly suggestive in this regard. Dr. Evans has promised to develop this side of the question for the benefit of the Society, and I hope that others will resurrect and bring hither a report of the cases which they have had that are in line with this inquiry.

AUDITO-MOTOR ATAXIA—MÈNIÈRE'S DISEASE.

BY JAMES A. CARMICHAEL, M.D., NEW YORK.

IN the last of the series of articles upon "Nervous Matter, What Is It?" I took occasion to advert to the above disease and its connection with the special sense of hearing. The reader of the article mentioned will remember that I then proposed to try and trace, at some future time, certain nervous associations whereby the motor and other phenomenal irregularities observed in Mènière's disease might possibly be explained. On consulting the most recent authorities upon this disease and its pathognomonic indications I find no allusion whatever to the connections that exist between the nerves of the auditory apparatus—the auditory nerve proper and its fibrillæ—and the nervous matter of the brain and spinal cord, by which a morbid irritation, beginning in the labyrinth of the ear, may be so extensively propagated as to call into vigorous activity the ataxic phenomena that distinguish and are characteristic of Mènière's disease. In the outset of the investigation of these phenomena it is necessary to be minute and clear in the comprehension of the ultimate associations of the auditory nerves from their very inception points of origin, and onward through their entire transit until their individual terminal fibrillation in the auditory labyrinth. In the series of articles just concluded the trend of investigation, as respects the sense of hearing, was in the direction of viewing these nerves as auditory agencies only, and therefore embraced their general distribution in the different departments of the internal ear. But now our scope of inquiry is limited to and localized in a certain locality that contains one specific member of the auditory trinity, as we have ventured to call it, and confined to that locality

alone, viz., the vestibular, and that portion of it called "the semi-circular canals." 'Tis true that in our effort to explain the causes of some of the ataxic phenomena witnessed in the disease under consideration, we may have to appeal to the functional operations of some of the other instruments of audition to help us to their probable solution. But, by common consent, Mènière's disease seems to be distinctly localized in the canals, and hence to them, their anatomy, their physical and mechanical construction, the auditory nerve agencies with which they are supplied, and the physiological function they are supposed, —though as yet by no means certain,—to perform, must we look, and from them follow the effects of irritation, beginning primitively among them, and by the facilities afforded by nerve contiguity and affinity, and the direct associations of nervous matter, trace them through cerebrum, cerebellum, their ganglia, their nuclei and nests of cell groups, and onward through crura, pons, medulla oblongata, spinal cord and its nerves, until we come upon a scene of physical disturbance and distress that may involve almost every organ in the body, and all of which we shall see when we question more particularly the symptoms that present themselves, and that proclaim the existence of Mènière's disease, with all its remote and ultimate effects. But before we can do this understandingly we must know positively the sources of origin and the associations of these auditory nerves, and our reader must accord to us his patient and attentive forbearance, and go along with us while we explore the secret places where are hidden the objects of our quest. To begin then, and according to deductions from the most recent, critical and conclusive explorations of brain localities, the acoustic or auditory nerves proceed from many and various sources of origin and have many and various media of association, as already indicated. We use the terms "acoustic" and "auditory" synonymously, but though having the same signification, yet they come from entirely different sources. The former, "acoustic," from the Greek *ακουο-ειν*, to hear, the latter, "auditory," from the Latin *audio, dire*, to hear. There is, however, in a strictly etymological sense, a differential signification between them. For example: It is a common expression to say that a hall, music hall, concert room, or theatre, or wherever vocal resonance is desirable, has good or bad acoustic properties, while we would question the correctness of the expression to say that a hall has good or bad auditory properties. If we did we would stand in some fear of the hypercritical reader, who might hurl at our devoted head the anathema of the polished Parisian Frenchman when the English cockney accosts him with "bon soir, monsieur," but which he pronounces "bong swor, mongseer," and whose "Sac-r-r-r-e mille tonne-r-r-r-es, quel fou d'Anglais" might be heard a block off! Yet we venture to suggest that the hall is so constructed as to favor the propagation of sound, hence its

acoustic properties facilitate hearing, whereas the word auditory applies more particularly to the keenness of perception of the auditory sense of the hearer. But in the matter before us the two words may be used indifferently, as it seems to us, because they both apply to the propagation of sound from without, its reception by the different departments of the ear, according to the functional capacities of each, as we have endeavored elsewhere to show, and its final dissemination through all the intricate organs of the brain that make up the vast instrument of the mind. Deeply embedded in the very penetralia of the brain, and according to the most modern investigations of busy searchers among brain recesses and the hitherto unexplored arcana of brain localities, there are to be found certain nests of cells whose microscopic ultimate organic structure shows a rich endowment with the material now known as "substantia gelatinosa," the most refined, subtle, and intensely vital element known in the whole realm of the nervous matter of the body. Wedged in between the cerebellum and the corpus restiforme on each side, is a nucleus of intensely vital cells, which has been denominated "the ventral or anterior nucleus of the acoustic nerve," the enlargement of which upon the outer surface of the medulla oblongata is called the "tuberculum acusticum." In this region, in which we reach the point of the lowest fibres of the pons, there is compressed into a relatively small space the region of origin of the acoustic, facial and abducens nerves. The reader will please mark this locus of association by contiguity and identity of origin of the nerve of hearing, of the facial and of ocular movement, and necessarily of expression. From the ventral nucleus of the acoustic arises a root, "radix posterior acustici," and from it also a tract passes to the corpus olivare superior, and across the pyramids, as a quadrangular medullary area, to the superior olivary body of the opposite side, thus connecting the acoustic nucleus with the olivary bodies of opposite sides. There is another acoustic nucleus, internal to the corpus restiforme, called "the dorsal acoustic nucleus," from whose ventral border emerges the "radix acustici anterior," or anterior acoustic root. *Through this nucleus the fibres of the direct sensory cerebellar tract pass*, thus forming a connection between the sense of hearing and the cerebellum—mark this association with the co-ordination of muscular movement, over which physiology teaches us the cerebellum presides—finally, numerous thick fibres that pass upwards and across the floor of the rhomboidal fossa, where they decussate. These are the "striæ acusticæ," and they pass from dorsal to ventral acoustic nuclei, and constitute the *central sensory tract of the acoustic nerves*. Monakow states "that these striæ atrophied after he had divided the opposite 'lemniscus' or fillet high up near the corpora quadrigemina. This, and their situation in the lower animals, lead to the conclusion that they are the

central sensory tract of the acoustic." It is hardly necessary to recall to the reader one of his earliest lessons in brain anatomy, viz., the direct connections of the cerebellum, by its superior peduncles, with the cerebrum, and all the encephalic ganglia, as also its direct connection, by its inferior peduncles, with the posterior columns of the cord. We here beg the reader again to hold on to these associations, and to fix in his mind that we are trying to establish the continuity of acoustic nuclei with the cerebrum, its cortex, and its ganglia, with the cerebellum, pons, medulla oblongata, spinal cord and its emergent nerves. One of the world's best exponents of anatomy, Cruveilhier, even though he lived and taught in a comparatively early period of the teachings of its philosophy and its physiological deductions, was yet sufficiently prescient of its future developments to lay down one cardinal law, and which he signified thus: "La continuité c'est la loi du système nerveux." Continuity is the law of the construction of the nervous system of the body, and as we now see, it is the same law governing the explorations and investigations of the keenest searchers in this wondrous part of man's organization. Now another curious fact presents itself to us. Does our reader anticipate us in the declaration of the similarity between the acoustic nuclei and the dissemination of their forces or powers by two roots, ventral and dorsal, and the fibres of their emergent and afferent nerve, does he recognize any, we might almost say, identity with the anterior and posterior nerves of the cord? Does he bear in mind the "tuberculum acusticum" of the medulla oblongata? What means the "tuberculum acusticum" of the medulla oblongata? May we rashly venture to denominate it a supplemental auditory nucleus deriving from the medulla and its tributary nervous contributions from various sources, still further additional pabulum, so to speak, to animate and refresh its exquisite functional necessities? Are we not accustomed to regard the medulla oblongata as the "vis ipsissima vitæ," the essence and sublimation of all vitality? Does not its destruction, as seen in operations upon living animals, snap the thread of life as by the lightning's bolt? Whence come those messengers that are perpetually carrying along their tremulous fibres the principle of life—whatever that may be—to meet cardiac need and pulmonary "besoin de respirer," and the other requirements of organic life? Just like the auditory, they emerge from deep cerebral, cerebellar cell and ganglionic recesses, and on their way are refreshed and reanimated by transient commerce with the great vital ganglion—for it is that and nothing more—the medulla oblongata, and then speed on their way to keep up heart-throb and breath murmur. If the reader accepts the story of auditory and acoustic association as we have told it, then there is nothing left to complete the picture of its perfection but that other story of its dissolution and decay. To do this we must go

to where the destroyer has entered and is doing its work of destruction among the terminal auditory fibrillæ in the labyrinth of the ear. So delicate and sensitive is this instrument of our organic nature that even "a breath of heaven may not visit it too rudely," not even though the lover may "sigh like a furnace, and breathe his vows to his mistress' eyebrows," in Shelley's beautiful words:

"I arise from dreams of thee
In the first sweet sleep of night
When the winds are breathing low
And the stars are shining bright,
I arise from dreams of thee
And a spirit in my feet
Hath led me, who knows how
To thy chamber window sweet."

We here recall an incident of early life, and of which we are reminded by the poet's expression, "Thy chamber window sweet." In company with a musical friend, we once ventured to a "chamber window sweet," to "vex the drowsy ear of night" with song and sentiment. It was in the quiet country, and we had come some distance, forgetful of all fatigue, and every other impediment in the fond hope and expectation of "breathing our vows" too, under cover of music's gentle and pardonable license. Our first obstruction appeared in canine form, but that only inspired a more valiant fervor. Like Othello, each of us hoped that "she loved me for the dangers I had passed, and I loved her that she did pity them," and we hailed the danger for the reward that lay beyond, so we piped up, and Romeo never wooed more winningly than we. Indeed we out-Romeo'd Romeo, for he only climbed a tree or a ladder, which was it? and got on a balcony, while we ran up and down the whole gamut of passion until we "tore it all to tatters," there wasn't a rag left. Then with bated and suspended breath, we awaited the response. It came, but in most "questionable shape." Instead of the Juliet that each had carried in his heart, an old colored woman appeared at the "chamber window sweet" and said "very much obleeged, young gentlemen, your music's mighty sweet, but de young ladies is all done gone away," and so, we too went away, sadder but wiser, chewing the bitter cud of the evanescence of life's fleeting hopes and cherished illusions. But we got over it, and now disease is here before us. Mènière is in possession, and the patient is racked with such torment that the buzz of even "the fly on the window-pane" has become a catapult wielded by the arms of a Titan. In as few words as possible we shall endeavor to give the history of Mènière's disease, the prevailing opinions respecting its locality, its etiology, and the treatment that, thus far, is recommended for its removal and cure. First, as respects its locality. According to Mènière, the disease is principally confined to the semi-circular canals, their ampullæ being the exact points of departure—other authorities think that both the vestibule and canals are either primarily involved or become so subsequently, and that the middle ear, and even

the antrum, may form additional localities affected by the morbid influences. Again, because of the deafness to musical sounds that sometimes exists, it is regarded as proof that the disease extends to the cochlea. So that, summing up the opinions entertained respecting the locality or localities that are primarily or secondarily affected in Mènière's disease, it may be stated that an irritation or inflammation beginning in the antrum, and by contiguity extending to the middle ear, and onward to the internal ear, Mènière's disease may become thus established, and may ultimately involve the whole auditory apparatus. As respects the etiology of this affection, the causes assigned for its production are principally of a catarrhal character, or it may be as one of the sequelæ of an acute specific fever, in which serous or hæmorrhagic inflammation has occurred in the labyrinth. The extension of syphilitic inflammations, and their disorganizing effects, may be placed in the category as potential factors of the disease, and quite recently Brunner has given as a possible cause, a vaso-motor neurosis of the vessels of the labyrinth, by which undue pressure is produced upon the delicate structures within the labyrinth, and which may give rise to the characteristic attendant phenomena. We have now given a brief synopsis of the opinions advanced as to the efficient causes of what is known as Mènière's disease. Before venturing upon an opinion as to the causes and effects of the symptoms observed, it would be well to enumerate the symptoms constituting the group most generally seen when the disease occurs. There are usually present, tinnitus aurium, sounds of various character and quality, sometimes greatly exaggerated, unnatural and discordant, deafness more or less profound, and, as before stated, the inability to distinguish musical sounds, or possibly, a painful exaggeration of musical tones, particularly where the patient is by nature easily impressed by the influences of music; in other words, possesses a musical temperament.

If the disease be acute, nausea and vomiting may occur, with the pallor and physical depression that generally attend them. But the most distressing of all effects, and one that produces the most profound disturbance, and also indicates the retro-active tendencies of the disease, is the almost ever present and persistent vertigo, with cerebral confusion, ocular disturbances, such as diplopia, dancing movements of objects, imperfect perception of distances—let the reader recall here what we have said respecting the close association at their points of origin of auditory and ocular nerves—so imperfect is the perception of distances that in reaching to touch an object the fingers will be extended too far, or not far enough. The vertigo may also be induced by any unusual mental effort, and the attacks often assume a paroxysmal character, so that the patient is liable to a seizure at any time. If complete deafness ensues the vertiginous and other symptoms subside. Could there be a more absolute proof of continuity between ear and brain than the fact of the

subsidence of all symptoms when deafness supervenes? The labyrinthine auditory fibrillæ have had their vitality choked and strangled, and they can no longer convey sounds of any kind, whether of melodious or harmonious tone, nor those of complaint under the infliction of disease. The cords of continuity have snapped, the silence of deafness is in possession now, and is the only legacy left by Mènière to the unfortunate patient. In repeating these characteristic phenomena of Mènière's disease, as we get them from the books, we must confess to a disappointment and a dissatisfaction at what seems to us to be faulty and inconclusive reasoning as respects the naming and indicating of the real and potential factors of those phenomena, but whose normal and healthy operations have become disturbed and perverted by the "*materies morbi*," whatever it may be, and now give evidence of that disturbance by the initiation of the symptoms we have enumerated, and which proclaim Mènière's disease. We are told that it begins in the semi-circular canals or some other part of the auditory apparatus. Well and good as far as that goes, and we might suppose that if it staid there it would only produce the phenomena naturally incident to auditory disturbance, viz., buzzing, roaring, sizzling and other distressing sounds, with impairment or exaggeration of hearing etc. But unhappily, a very different state of things is inaugurated, and before we get to the end of them we find that not only has the whole mental machinery been "put out of gear," but vision, and muscular co-ordination have become interfered with and interrupted, and cardiac, pulmonary, and gastric functional disturbances instituted, as seen in ocular spectra, in audito-motor ataxia, and in the pallor, faintness, irregular respiration, nausea and vomiting, and other sympathetic and concomitant symptoms; nay, even death itself may supervene as the result of acute inflammations and hæmorrhagic or serous effusions, that owe their "*ratio vivendi*" to the seemingly insignificant initial cause as represented by Mènière's disease. In the presence of such august authority as we have reproduced, dare we venture an opinion or suggestion that may look to a possible solution of the why and wherefore of these symptomatic phenomena above enumerated? When Macbeth was "cornered," so to speak, his spirit rose to the occasion, and his kingly dignity asserted itself in his famous "Lay on, Macduff. And damned be he who first cries hold, enough." We claim the possession of a little of that self-same "spirit" and take the chances of the laying on process. In those semi-circular canals, vestibule and cochlea, there are innumerable minutely penicillated and exquisitely delicate, tender and sensitive nerve fibrillæ, whose organic structure is of a material in which the very essence of vitality lives. There's not a sound that can be generated and borne by atmospheric undulation, from the whispering sigh that gently breathes among the tremulous leaves deep in forest depths, to the crashing roar of the

belching cannon in the carnival of death where brutal man kills brutal man, and mars God's image with ferocious hate, that does not come within the auditory scope of the nervous matter with which the organ or organs of hearing—we hope we have already proved elsewhere that audition is multiple and trinitarian—are supplied. Our next step must be taken brainward, beginning at the point designated by Mènière, viz., the location of his disease in the semi-circular canals. We have said that to the canals, their anatomy, their physical and mechanical construction, the auditory nerve-agencies with which they are supplied, and the physiological function they are supposed to perform, must we look, and from them follow the effects of irritation beginning among them, and trace them through cerebrum, cerebellum, their ganglia, nuclei and nests of cell groups, and onward through crura, pons, medulla oblongata and spinal cord. Now to do this as we would desire to do it, would require a more extended space than journal limits will permit, so we can but glance cursorily at the most salient points that exhibit themselves as we pass along through brain mazes and recesses. First, the prominent anatomical facts in the semi-circular canals. They are, their number, three, their angles of relation to vestibule, which by experimental physiology are supposed to regulate the distance of sounds—not proven—the motor ataxic effects of their physical destruction in animals or invasion by diseases, their enlarged ampullæ communicating with vestibule for the reception of *certain sounds*, their lining of soft endothelium in which auditory fibrillæ lie snugly enmeshed, bathed in Breschet's endolymph and surrounded by Valsalva's perilymph. A word intercurrently here upon this fluid, as we believe it to be an important factor in the propagation of morbid impulses. While being in its normal condition a protective agency to auditory fibrillæ whereby they are defended against the dangerous impact of sonorous violence, it may become a medium of transmission to the brain of the effects of irritations and inflammations located in the labyrinth of the ear. The fluid perilymph and endolymph of the vestibule, semicircular canals and cochlea is directly continuous with the sub-arachnoid ventricular and cephalo-rachidian fluids. So that an undulatory agitation beginning anywhere in the labyrinth of the ear, may be felt by cerebrum, cerebellum, cortex, convolution, ventricular and other ganglia, ganglionic cell group, pons, medulla oblongata, spinal cord, and afferent and efferent cranial and spinal nerves, and the lengthened chain of sympathetic ganglia and nerves from ophthalmic ganglion to ganglion impar. Does it occur to us that our sentient being floats as does the fish in its native element? That the physical instrument of every faculty we possess is from its very inception upheld and protected by tutelar drops of bland, soft, unctuous fluid that may become acrid and irritating, or may so multiply that we become submerged as it were, and

drown in our own protective element. That those parts of us wherein are contained our faculties, mental powers, and the attributes that make us "a little lower than the angels," tho' heaven knows that with a very great many of us, this is but a poetic fancy, and we often reach a depth so much lower that we can only cry out with the psalmist "De profundis clamavi," out of the depths do I cry. Lord, hearest thou the voice of my complaint? That all these owe their security to the same tutelar element that surrounds Corti's rods, ciliae and auditory fibrillae, and which when gently agitated by music's sweet sounds conveys them to every atom of nervous matter, and to all the faculties of thought, imagination, memory, the emotional impulses of love and affection, and all the kindly instincts of friendship and friendly intercourse until every organ and instrument of our intellectual, moral and emotional nature become vibrant with the murmurous undulation, and our whole being is filled and runs over with responsive sympathy. But let disease invade the homes of the tender and delicate auditory fibrillae. Let perilymph and endolymph have the purity of their drops poisoned by the noxious elements, then the whole array of symptoms that we have noted starts up into vigorous activity, and the auditory nerve from its terminal fibrillae in all parts of the labyrinth to its cell groups and ganglia of origin, and all the associations it holds with cerebrum, cerebellum, ganglia, pons, medulla oblongata, spinal cord and nerves, cranial and spinal, respond to the morbid invasion. Then to the functional disturbances of vision, of audition, of heart, lungs and stomach, and the vertiginous confusion may be added imperfect and uncertain touch and palpation, and ataxic and irregular locomotion and movement, and the audito-motor ataxia of Mènière's disease become established.

A few final words in relation to treatment, and they shall embrace the most recent views upon this subject. To control the indications of cerebral irritation, the use of bromide is recommended in from fifteen to twenty grains, three times daily, and the addition of a few drops of belladonna will increase the effect. Counter irritation by blister or actual cantery over the mastoid process sometimes gives relief. The combined use of morphine and bromides is also advised. Charcot recommends the persistent use of quinine, given in eight to fifteen grains twice or thrice daily, and continued for several weeks. Should the aural effects of the quinine appear, stops its use for a few days and then renew it. Salicylate of sodium in large doses, as also bromide of sodium and ammonium may be beneficial, gelsemium in ten minum doses daily will produce quiet and restful sleep; other forms of treatment embrace the hypodermic injection of pilocarpine. Four to ten drops of a four per cent. solution, or injection into middle ear of a few drops of a one per cent. solution of potassium iodide, with an ointment of the iodide of potas-

sium rubbed over the mastoid process. The last remedy should be given, five to fifteen grains, three times a day internally; electricity in the later stages has its supporters. Hydrobromic acid is also recommended. Should dyspeptic symptoms occur, give pepsin in connection with bromide; avoid mental strains, the use of alcohol and tobacco.

According to Dr. Romeo Gongardi ("Annales des Maladies de l'oreille") Mènière's disease is cured by three powders daily of bromide of potassium, three grammes each, and three pills of the valarinate of iron, one gramme, opium, twenty-five centigrammes, extract and powder of casc. sag. q. s., ad. pill xij. Amyl. nit., nitro-glycerine, arnica, conium and cicuta have been mentioned as useful remedies.

DRESS REFORM.

BY W. THORNTON PARKER, M. D.

Member Mass. Med. Society, Amer. Med. Assn., etc.

IN an article on Parisian fashionable folly, by Mr. B. O. Flower, the accomplished editor of the *Arena*, published in the June number of this year thus calls attention to the opportune time for dress reform which exists at present:

"For generations the woman of fashion has been a slave to the cupidity of the shrewd and unscrupulous, and the caprice of the shallow and frivolous. * * * How appropriate is the time for casting aside the bondage of fashion and adopting such attire as common sense and the individual judgment may suggest! For shopping and street wear, as well as for the bicycle, the Syrian costume is desirable. For morning wear the Syrian or modified gymnasium costumes are eminently suitable. For evening wear, what is more graceful or appropriate than a Grecian robe? But it is not the purpose of the friends of dress reform to lay down any hard and fast lines as to special styles. They demand freedom in dress, in the name of health, comfort and common sense."

Surely medical men have long worked against the senseless and infamous clothing which ignorant fashion makers have forced upon women. This injury which has resulted from clothing unsuitable for the proper exercise of the body has had a very serious effect upon the health of women throughout the civilized world. It has done much to diminish the strength and vitality of the human race. It has been largely answerable for the increasing prevalence of diseases peculiar to women and has very decidedly contributed to the depreciation of womanly strength. That thousands have perished on account of irrational clothing, and thousands more have been made invalids there can be no doubt. Mr. Flower's article is one which cannot fail to receive the hearty approval of the medical profession.

LOCOMOTOR ATAXIA AND GENERAL PARESIS.

BY LOUISE FISKE BRYSON, M.D., NEW YORK.

THE theory has been advanced of late that locomotor ataxia and general paresis of the insane are conditions arising from one parent stem. Their clinical association is beyond dispute, yet a relation other than that of coincidence may be questioned. A lively discussion has been running through French journals for some time past. Raymond states that true tabes does not always confine itself to lesions of the posterior part of the cord, but extends into the motor cells and lateral tracts. Often, then, ataxia is a systemic disease, with a tendency to diffusion of the sclerotic process. Certain etiological factors that are supposed to produce ataxia and paresis are alike, namely, syphilis and alcohol. There is much difference of opinion upon the question of morbid anatomy and extension of morbid processes. The idea of any identity of locomotor ataxia and paresis is rejected by Ballet and Joffroy on histological grounds. Here differences of opinion may have a foundation that is more apparent than real, for when both abnormalities are present the symptoms are complex, involving the cerebral and spinal vessels, the neuroglia and nerve cells. Raymond considers the vascular lesion predominant, while Ballet finds that the beginning of the morbid process is in the neuroglia. According to Joffroy, the cerebral cells are primarily at fault in paresis, the interstitial sclerosis being secondary. Raymond advances an ingenious theory to the effect that enarteritis exists in the cord as well as in the brain and sclerosis follows in consequence—diffuse in the brain and systemic in the cord—the morbid process being identical because the disease is the same, though finding its expression in different localities. Ballet, however, looks upon locomotor ataxia as a myelitis, peri-cylindrical in origin, the neuroglia and the spinal vessels being implicated secondarily; but paresis is a diffuse encephalitis of probable vascular origin, the two bearing no relation other than association in the same subject. Dana ("Text-Book of Nervous Diseases," 1892), defines locomotor ataxia as characterized anatomically "by a degenerative sclerosis chiefly marked in the posterior columns of the cord and posterior roots, and to a less extent in the peripheral nerves. In *Médecine Moderne*, June 16th, 1892, there is an abstract of Rendu's paper that gives a survey of these various views, the author favoring the idea that in visceral and neural sclerosis the parenchyma of the cell is primarily at fault, and that connective tissue and vascular proliferations are secondary lesions. Spitzka, in speaking of the morbid anatomy of tabes dorsalis ("Pepper's System of Medicine," p. 841), says: "In the maximum foci of disease the conducting elements of the cord are nearly destroyed, and their place is occupied by a firm connective tissue substance, made up of wavy

bundles, enclosing here and there a few atrophied axis-cylinders with wasted myelin-sheaths. The blood vessels participate in the morbid process, at least as far as the larger vessels are concerned. * * * Sclerosis of the areas of the spinal cord which are affected is preceded by a stage of granular degeneration. * * * In parietic dementia, a disease whose complicating cord affection very closely resembles that of locomotor ataxia, a granular degeneration is very common in earlier periods, while in later periods a sclerotic tissue is found in the same locality."

—*Passiflora incarnata*, tinct., a fine remedy to give for immediate bad effects from a "spree."

—The number of deaths from typhoid fever in Chicago during the past year was 1,479, a little better showing than in 1891. In New York, which is 100 per cent. larger, the number was only 400.

—From the official return of the director-general of direct taxes in Italy, it appears that the medical profession occupies the lowest position of all the professions in point of income. The notaries come first, advocates next, engineers and architects are a good third, and last of all come the doctors, with an average of professional earnings of little more than half that of the notaries.

—In the *New York Medical Journal*, Jan. 7th, Dr. W. C. Kloman, of Baltimore, Md., reports thirty cases of hernia successfully treated—that is radically cured by hypodermic into the edges of the hernial ring, at intervals of three or four days until the opening is entirely closed. No pain is felt and the patient goes about his work during the whole treatment wearing a truss. Some cases have already remained cured more than ten years. The doctor does not state what material is used for injection, but says it is the discovery of Dr. C. E. McCauldin, of Atlanta, Ga.

Cancroin.—Prof. Adam Kiewiez, in the small volume recently written by him upon cancer, calls attention to the parasitic nature of cancer, for when fresh cancer tissue is triturated with distilled water, the filtrate obtained therefrom be injected into the brain of animals it causes a decided specific action. From this, Adam Kiewiez infers that cancer tissue contains a poison, the products of the cancer cells; the latter he claims to be the parasites, and the cause of cancer, and calls them sarkolytes, places them with the coccidia and terms them coccidium sarkolytus, the cancroin being their excretion during growth, and therefore seeks in this fluid the property of producing immunity against cancer in the individual. Adam Kiewiez has also made the remarkable discovery that the ptomaine neurin has exactly similar properties to cancroin, the neurin showing the same specific action towards the cancer cells and thinks that the two are the same identical body. The action of cancroin is both symptomatic and specific. The symptomatic action is quieting, pain lessening and deodorizing; the specific action destroys the cancer elements by causing in them death and reaction, and is indicated by disappearance of the cancerous infiltration through resorption on the one hand, through necrotic disintegration on the other hand, and lastly by inflammation. In reference to the healing action Adam Kiewiez states that in cancroin a new principle has been found which exerts a reasonable therapeutic influence upon the carcinoma and that the road has been opened for further advancement which will follow the treatment of cancer.

The neurin preparation consists of a twenty-five cent. solution of neurin in water, neutralized with citric acid, and the product saturated with carbolic acid and then diluted with an equal quantity of water. Cancroin is prepared by extracting fresh cancer tissue with water; that obtained by inoculation of the rabbit's brain may be used as well.

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O TEMPORA! O MORES!

SOLD again, rises upon the still air the wailing cry of some of the earnest souls who struggled so fiercely and fought so valiantly for that three-headed state examination board which was to place Homœopathy on immovable foundations, and end forever the long contest for legal rights and the freedom of medical thought. Oh, horror of horrors! the act itself, like the boomerang, turned backward to smite its unskilled throwers and confound all their calculations. For lo! when brought to the test of this model law into which the most profound skill and far reaching wisdom of the State Society had been incorporated and to which was given the power of nominating the examiners of its school, one element was revealed which, in the construction of the law, had never been taken into consideration—viz.: the lack of fitness from deficient instruction of the students of one Homœopathic college at least, to stand side by side with the students of those really scientific institutions who aimed to make their graduates, by the large clinical facilities given them, and the fullness of their general instruction, physicians in the broadest and largest sense of the term. It was a humiliating fact to educated men, to those among the framers of the act, who had the real interest of the profession and the public at heart through a high standard of medical education, to find in that final test, framed by themselves, and in which they were the examiners, fifty per cent. of the applicants for license at the hands of the Homœopathic examiners, were rejected, number-

ing more than three times as many as were rejected under the old school examinations.

Undoubtedly one great cause of failure was a lack of knowledge of materia medica outside of mere symptomatology. "The physiological effects, uses and action of drugs" which really forms the basis of a scientific materia medica and therapeutics had been shamefully neglected in the unscientific training of the defeated students, and unfortunately the poor boys who had given their time and paid their money for instruction they did not receive were subjected to a humiliation and shame which rightly belonged to their Alma Mater. As an illustration of the ignorance of many Homœopathic students of the "physiological effect, uses and doses of drugs," we quote from Dr. Searle, a state examiner, in a very able argument addressed to the Homœopathic profession of the State:

"Within a few days of the present writing an examination was held at a certain Homœopathic hospital for members of the house staff. There were eight candidates. Among the questions, these were asked: 'What are physiological doses of tincture of aconite and belladonna and of strychnine: One candidate gave twelve drops as the dose of aconite, another gave one drachm as a dose of the tincture of aconite and belladonna, while the dose of strychnine was to be one-half grain.'" Are such men fit to stand in the ranks of a learned profession as physicians, and is not the medical college who sends them out with the degree of Doctor of Medicine, a nuisance and a disgrace which should be either made to reform its teachings or close its doors. It does not take long for the student to learn after entering practice, who has passed through this one-sided medical training, how often he is powerless in emergencies where a broader medical education would have rendered him at home.

Dr. Peabody, the President of the Massachusetts Homœopathic Medical Society, says in his inaugural address, "our students and young physicians should receive instructions for every emergency that is likely to arise. In the centuries which have passed a great many good things have been discovered besides those brought to light by Hahnemann, and some quite recently. Does any one hold a mortgage on them? Are they the exclusive right of any school or sect?"

"In my office hangs a parchment which says in part that I was granted the degree of M. D.; also in consideration the additional degree of M. H. D. From the instruction I received the latter was the only one I ought to have had, and they had no

moral right to give me anything else. But I should be the laughing stock of you all if I should use it or allow it to be used in connection with my name.

"Our own Boston University School of Medicine has taken an advanced position, and the word Homœopathic does not appear in its name, and in my judgment is as much out of place in the name of a school that makes physicians in the broadest sense, as it is on the sign of a general practitioner, the custom thirty years ago, but now almost obsolete."

It is very easy to see why so large a per cent. of Homœopathic students were rejected at the State examination. Were they rejected unwisely? Let the chagrin, the mortification and the shame of the young men who for the first time in their lives were brought face to face with questions which opened a world of knowledge, and of which they knew nothing, but of which they could not help but see the importance, answer. They learned when too late that medical science was not limited to a single dogma, and that the State required of those who were to receive its license to practice medicine within its limits a wider knowledge than they had obtained in the exclusive idea in which they had been trained.

One would naturally suppose the Homœopathic profession throughout the State would look upon the failure of so large a percentage of its students to pass the State examination as an indication of a lack of breadth of the curriculum of study in the institution where they graduated, and demand more efficient teaching or else send their students to institutions where it could be secured. This undoubtedly is the feeling of a large number in the profession who are getting tired of the dictation of a class of leaders who have in the past, and are now bringing shame and disgrace on the cause of progress and retarding its advance, but not of that organization called the State Society, which blows hot or cold, as it suits its humor. This society is summoned to meet in solemn conclave at a special meeting and attempts to get out of the ignominious position in which it has been placed by the action of its own law by insisting by almost a unanimous vote that hereafter questions upon 'physiological effects, uses, and doses of drugs' which formed a part of the subjects upon which their own officers examined, shall be excluded. Oh, consistency, thou art indeed a jewel! Better by far meet the question squarely and place themselves on a line with the progress of the age.

Dr. Searle, in the argument to which we have

already referred, briefly summarizes some few subjects which would be barred out by the one-sided plan proposed by the society:

"First—Anæsthetics, local and general.

Second—Antiseptics and all included therein.

Third—Germicides, the treatment of parasites.

Fourth—Heart stimulants, including the uses of digitalis, strophanthus, etc.

Fifth—Diuretics, in all the forms of dropsy.

Sixth—The employment of ergot for its primary effects.

Seventh—The use of mydriatics in iritis, of eserine in glaucoma, etc.

Eighth—The employment of anodynes in relieving pain.

Ninth—The use of apomorphia and other emetics.

Tenth—The use of quinine for its primary effects.

Eleventh—The local treatment of uterine diseases, of catarrhs, of ulcers, general or special or specific, of diphtheria, of chancre and chancroid, of sunstroke, of diseases of the bladder and stomach, of ophthalmia neonatorum or gonorrhœa, of otorrhœa, etc.

Twelfth—The use of external and internal cold or heat, of external irritants or emollients, of enemata, of iodine, of hæmostatics.

Thirteenth—The treatment of syphilis in some of its forms by iodide of potash.

Fourteenth—The treatment of tetanus, hydrophobia, delirium tremens, convulsions, uræmia, trichinosis, of paralysis by electricity, etc.

Fifteenth—The intelligent care of patients who daily come to us from the old school, loaded with drug influences."

The State Society which pretends to speak for the entire profession numbers but little over four hundred members, not one-fifth of the Homœopathic physicians of the State, and of this small number not one quarter ever attend the meetings of the Society, and yet this minority of the profession, swayed hither and thither by faction, claim to voice the sentiment of the profession of this great State. The time has come to meet this question fairly, squarely and honestly; to take the chip off from our shoulder and fight only for principle; to always stand out bravely for the right and never be ashamed to show our hand, our motives and our action to the world. Our cause has been retarded in the past, more than language can express, by permitting selfish and unprincipled self-constituted leaders to sow the seeds of discord by false statements and base

slanders without an effort to suppress and hold up to scorn a tyranny so degrading. Now is the time to call a halt to that petty, selfish tyranny which seeks to influence public sentiment, and fetter professional action and thought by devices which will not always stand the test of a scrutiny which seeks only to establish truth. No honorable physician, whatever has been his medical training, will hesitate to meet the whole world in that open spirit of frankness and candor which has nothing to conceal, and which is ever ready to give and take from the illimitable field of science with its ten thousand ardent workers. When all our colleges, as many have already done, place themselves in line with the progress of the age, there may be a vanishing into darkness of individual arrogance and impudence, but we shall have fewer rejections for license to practice medicine, because there will be more scientific work, and a clearer insight into therapeutics, through the physiological effects of remedial agents, and less personal glorification. There will be more schools conducted for the benefit of the medical student and fewer for the sole profit of the profession, more freedom of thought, more independence of judgment, and a more general knowledge and acceptance of cardinal precepts which have been tested and found in accordance with the advances of science.

THE NEW SURGEON-GENERAL.

LIEUTENANT - COLONEL GEORGE M. STERNBERG, M. D., has been appointed to succeed Dr. Sutherland as Surgeon-General of the army. The appointment is thought to be an excellent one, notwithstanding the fact that it is made over the heads of a large number of seniors equal to promotion.

Surgeon-General Sternberg was born in New York, June 8, 1838, and was appointed an assistant surgeon in the army, with the rank of first lieutenant, in May, 1861. For faithful and meritorious services during the war he was brevetted captain and major in the army. In May, 1866, he secured the actual rank of captain and assistant surgeon, and in December, 1875, major and surgeon. Two years ago he was made Deputy Surgeon-General, with the rank of lieutenant colonel.

General Sternberg is usually spoken of as the cholera and yellow fever expert, and his record of service is a long one. His professional standing is of the highest, and his experience in epidemics

of cholera and yellow fever so large that if he possesses the executive ability, he should fill the position to which he has been appointed with satisfaction.

SOME years since we urged in these columns the practicability of organizing a social club for physicians, where medical men could meet to talk over their affairs and become better acquainted with each other. Circumstances did not seem to favor such an organization, and the matter was temporarily suspended. When the Academy of Medicine decided to erect its own building, we renewed our proposition and urged this Society to carry out our scheme. There were many obstacles in the way of the consummation of the plan, but we now hear that the way is clear to complete the project. The Academy of Medicine has excellent facilities in its new and spacious quarters, and we have no doubt that the officers, headed by their progressive and energetic President, Dr. Roosa, will accomplish all that will be desired in this direction. The Academy should be the home of all medical men in this city, and we hope for that unity in the profession which will bring it about. If the members of the profession knew each other better, there would be less bickering, hence our effort to introduce the social element as a means to this end.

WE have been present at several medical meetings of late, where papers have been read that were absolutely inaudible a few feet away from the reader! This state of things was due to several causes: First, the reading desk was so arranged as to require the head of the reader to be bowed, thus preventing the voice from being thrown out into the room. Second, complete ignorance as to how to use the voice, incomplete articulation, a sort of mumbling. These papers of course could not be discussed, because no one in the audience had heard what was read.

There can be no excuse for an essayist to consume valuable time in this manner, and there should be some way of ascertaining whether the reader of a paper is competent to make himself understood, before he is announced as an expected participant in a particular meeting.

If one has not elocutionary knowledge sufficient to read a paper acceptably, he should study for this purpose, or else abandon the effort. A little practice, or a few lessons from a teacher would enable the majority to read their effusions satisfactorily, to the great relief of their hearers.

DR. JAS. G. KIERNAN, of Chicago, in reviewing "Browning's Modern Homœopathy" says in part: "It is written above the heads of the populace and displays an unusual ignorance of the history of Homœopathy and its periodical literature. Hahnemann's career is slurred over. Its quackish incidents, like the secret belladonna scarlatina specific, are not mentioned. Yet to these was chiefly due his repudiation by the reputable profession. That at one time his doctrines were regarded with favor is shown by his election as honorary member of the New York County Medical Society, in recognition of his eminence in medical science. In the United States Hahnemania, however, owed its spread to disgraceful cliquism. The New York County Medical Society members, after their election of Hahnemann, proceeded to test his doctrines. Hahnemann's later charlatanism gave the members of the secret Kappa Lambda clique an advantage, and the investigators of the Hahnemannian theories (who had not assumed a specific title) were expelled. Such wanton injustice to eminent physicians gave Hahnemannism a status which it long retained. These facts are omitted and many others of equal interest and importance. Much absurd ridicule is thrown on Hahnemann's proving of quinine. Quinine does in certain persons produce fever from over-stimulation of the heat-regulating center, and similar effects have been noted with other antipyretics. These and other cases of 'untoward effects' furnish the little basis of truth underlying the Homœopathic theory. In ridiculing the 'nosodes,' Dr. Browning could have made an excellent point by showing that these relics of mediæval medicine were retained by Homœopathy, which was and is said to have delivered medicine from them. On the whole, the present essay seems uncalled for."

Dr. Kiernan, in speaking of the ridiculous "nosodes," has nothing to say of the equally nonsensical practices which have originated since Hahnemann's time. No one objects to the investigation of the transcendental nonsense which is being brought before the profession every day, and why should we care what the so-called Homœopathic cranks may bring forward?

Dr. Kiernan, then a resident of this city, was perfectly familiar with the "clique" to which he refers, and could write its full history if he would.

In consequence of the ostracism which was thus practiced before a sectarian title was assumed, and because "eminent physicians" were expelled, would it not be proper and just for the "Medical Society of the County of New York" to rectify

this error in some suitable manner, to the end that unity might be re-established? Chapter xvii of the By-Laws of the County Society provides that "no member of this Society shall assume any sectarian designation," etc., and this should be sufficient discipline for its members without Article 3 of Chapter xii, which requires of candidates to membership "if his diploma or license be of sectarian character, unless the applicant declare in writing his or her abnegation of sectarian principles and practice," he cannot be recommended. *This By-Law ought to be rescinded at the next annual meeting!*

MALARIA IN WATER.—The *Sanitary Era* says: "We have quoted from year to year, many instances transpiring of severe intermittent fever as the result of drinking, or even bathing in, vegetation-contaminated waters, such as most physicians have been in the habit of indorsing as perfectly harmless. Of the terrible African fever, Surgeon Parke, the companion of Stanley, writes, (*Lancet*, May 28): 'Perhaps the sharpest attack experienced during this part of the journey was my own, which followed a ducking received in crossing a tributary of the Congo. My donkey slipped accidentally and completely submerged me. This was but the first of a long series of experiences in which I found that every wetting in Equatorial Africa meant a subsequent attack of intermittent fever. Another lesson soon learnt, and for which I was still less prepared, was the fact that our donkeys after each corresponding drenching developed febrile symptoms exactly corresponding to those of their fellow travelers.'"

THE Medical Standard says: "Scientific physicians cannot but approve the proposal of Dr. Obetz, of the Homœopathic Department of the University of Michigan, that that university should abandon the sectarian distinction between its graduates and teach Homœopathy to all the medical students as part of the curriculum. It is a most significant fact, however, that Dr. Obetz has been ostracised by the Michigan Homœopathic Society for this proposal."

The dual action of drugs should be taught in every medical college, and this would do away with all distinctively Homœopathic colleges. The indications for the use of medicines in small doses should be given every medical student, and thus prepare him for greater usefulness.

Let the unsectarian colleges act upon this suggestion and see how long the sectarians will hold out!

OZONE AS A DISINFECTANT.—The fact that electricity enables ozone to be generated cheaply and on a large scale may have a most important bearing in the future as a sanitary measure, more particularly, however, in relation to cholera epidemic. That some connection exists between the spread of cholera and the scarcity of ozone in the atmosphere, there appears to be little doubt from observations begun as early as 1884 and continued ever since. There is a normal amount of ozone in the atmosphere and it appears from these observations that at places where the cholera existed, the amount of ozone in the atmosphere was below this normal, sometimes even to a very marked degree. When made by chemical processes ozone may be injurious from the presence of impurities. If, however, the air be ozonized by means of electricity it has been found to be quite non-injurious. P. De Puyt recently made some very interesting and instructive compilations regarding this matter, and urges very strongly the use of ozonized air, not only as a destroyer of germs in hospitals, lazarettos, schools, public houses and other places, but also as a preventive in the case of a threatened epidemic. Eleven or twelve centigrams per liter of air, which is easily produced by electrical means, and was formerly claimed to be a dangerously large quantity, he says has been found to be perfectly harmless even for infants, if made by electrical means.

COLOR-BLINDNESS "RUNS IN THE FAMILY."—The committee on color-vision appointed by the council of the Royal Society have obtained some curious information. They have held thirty meetings and examined more than five hundred individuals. They found that the defect most common, and therefore most dangerous, is what is known as red-green blindness, which fails to distinguish between red and green, and both are often mistaken for white. As these three colors are those generally used for signals, at sea as well as on land, they think rigorous tests ought to be applied to those who seek employment in positions where the safety of human life depends upon a complete power of accurate and rapid discrimination. It was also found that color-blindness of one pronounced kind or another runs in a family, and that it is much less among women than among men. Cases are recorded where it was caused by disease and by the excessive use of tobacco. With respect to the latter, G. Nettleship, in his evidence before the committee, stated that he had never seen a case

where alcohol solely had caused color-blindness, but there is abundant testimony that tobacco alone can cause it in tetotalers, especially if the smokers use such tobaccos as shag cavendish and strong cigars. Cases also occurred among women smokers. The committee recommend that the Board of Trade or some other central authority should schedule certain employments in the mercantile marine and on railways as dangerous to be filled by persons whose vision is defective either for color or form, or who are ignorant of the names of colors, and that all applicants for such positions should be required to hold a color certificate from duly qualified examiners.

THERE is undoubtedly a *hygiene* of color, and this is especially true in small cities and towns, and in the open country, where bad taste is quite frequently noticeable in painting of buildings. A thing of beauty is a joy forever, and a well painted house certainly tends to make the inmates happier and healthier, and to exert a pleasant influence in many directions. A house painted with glaring and ugly coloring exerts a depressing influence, sometimes amounting to such melancholia as may alone be the means of disastrous results.

Good taste is an important element in making home healthy and happy.

All that tends to increase legitimate pleasure, like music, art, pleasing landscape, good taste and agreeable impressions in general tend to longevity. The painter, if he be but a house painter, has in his power opportunities to teach useful lessons in life.

THE State Normal School at Salem, Mass., has for several years employed a physician to lecture to the graduating class on "First Aid to the Injured." An effort is being made to increase the amount of good which has already been accomplished by inducing other schools, both public and private, to give this useful instruction.

It is well worth while that those who have the keeping of children in their care should know how to afford needed aid promptly in case of accidents. Practical and theoretical instruction in our Normal Schools may be the means of saving much suffering, and not improbably averting what might otherwise have become fatal accidents.

The New York Society for instruction in First Aid and the Massachusetts Emergency (Hygiene Association) are ably seconding the noble work which the St. John's Ambulance Association of England have so successfully carried on.

SENATOR LELAND STANFORD, whose death was recently announced, was something more than a mere money gatherer; he knew how to appropriate the millions he accumulated in legitimate business enterprise for the highest benefit of the world. Four millions of his fortune of forty million dollars went to the founding of a university in California as a memorial to his son, the purpose of which Mr. Stanford describes "as a school more especially directed to the investigation and teaching of how to control the forces of nature—how to make the elements the servants of men—from the kindergarten pupil to the post-graduate, who may have a desire for deeper investigation."

The university which Senator Stanford founded at Palo Alto ought, within a reasonable time, to be among the leading American institutions. Its site, amid the fertile, rolling hills of Santa Clara County, comprises 8,400 acres. Its endowment of land is about 85,000 acres, in three tracts. The university is distinctly modern in policy. Utilitarianism is the central idea. The courses are more liberally elective than in any American college of its rank.

Every student must select his calling in life, and according to his choice some professor becomes his educational guardian, assisting him to map out his college course. The result is specialization of the most advanced order.

The institution, with one of the ablest faculties in every department of knowledge in the world, affords the same advantages to women as to men, it being Mr. Stanford's theory that it was even more important that women should be educated than men, as they had intrusted to them the early training and the education of the future citizen of the republic.

A VERY DANGEROUS IMPURITY IN PHENACETINE.—Dr. C. O. Curtman, of St. Louis, a few days ago received a letter from Dr. L. Reuter, of Heitzerberg (*Weekly Medical Review*), announcing a very dangerous impurity of phenacetine—a residuum in the process of its manufacture by the Baker Color Works. In its manufacture phenacetine has to pass through the stage of *paraphenacetinide*, which is a very powerful poison. It is the result of imperfect conversion into phenacetine by means of acetic acid, which completes the process. It is easily discovered by placing a small quantity of chloral hydrate in a test-tube, melting it at the heat of boiling water, and then adding one-fifth of phenacetine

to it. *If it is pure* the mixture will remain colorless, forming a diffused mass. *If it is impure*—if it is *phenacetinide*—it will become of a purple color, passing from red into blue within a very short time—a half minute. In a number of instances recently treated in Heitzerberg, this impurity was found in the phenacetine described—producing inflammation of the kidneys, many cases being very severe.

DR. CONRAD WESSELHÆFT charges a number of his colleagues with gross slander and defamation, in respect to his translation of Hahnemann's *Organon*. He says that "vulgar abuse without argument * * * means dissolution and disintegration in the near future."

If so eminent a scholar as Dr. Wesselhæft cannot translate Hahnemann's text correctly, it had better be left untranslated. Judging from the bickering there is over this work, one would suppose that the original was not clearly expressed, and of doubtful value to students. If Hahnemann had taken the view some writers do, there would never have been an *Organon* to fight over.

It is really amusing to read what some of these disciples say of him. There are a few who think medical progress really ended with the life of their Master! Some colleges which claim to be unsectarian, seem to place this book above all others in their curriculum?

Why not let it stand for what it is worth in the field of medical history?

WHILE many departments exist in the practice of medicine known as "specialties," Climatology has heretofore received little attention as a specialty. It has been more or less associated with the practice of those who make the throat and lungs *special practice*, whereas it would seem to be in view of its very great importance quite as entitled to special study and research as any other department of the medical profession.

ANTIDOTE FOR CARBOLIC ACID.—An Italian tailor swallowed by mistake thirty grams of carbolic acid. Dr. Moreit, of Ancona, using a rubber catheter, immediately introduced by slow degrees into the patient's stomach a strong solution of sulphate of soda, which forms with carbolic acid a harmless mixture. In an hour's time, the patient, who had been in a most critical condition, began to revive. Inhalations of ammonia were then used to hasten up the process, and little by little the poisoned man rallied so that an emetic, followed by a dose of lime water, finished the cure.

MASTICATION AND DIGESTION.—Gladstone is reported to have said that he gives each mouthful of food thirty-two bites in masticating. Our own rule, says the *Times and Register* is to continue chewing a mouthful of food as long as it gives pleasure to the taste. At any rate, it may be laid down as a rule, that very seldom will food prove indigestible, if the one who eats it is thoroughly conscientious in reducing every bit of it to a fine pulp before swallowing it. Our reply to patients, when asked what food is allowed, is generally, anything in reasonable quantity, that you will chew thoroughly, having due regard of course, to special diseased conditions and circumstances. Following the principles outlined above, persons of no more than the average digestive power may safely indulge in a meal composed of articles reputed indigestible.

THE meetings of the Medical Congresses recently held in Chicago have been more social than scientific, and the reports present but little of interest. We are indebted to the *Daily Medical Century* for its report of the proceedings of the Homœopathic Congress and the American Institute of Homœopathy. There was an attendance of over nine hundred physicians, most if not all drawn together to see the wonders of the White City, and in this they certainly were not disappointed. We do not believe any other city in the world could equal the grandeur, and the artistic beauty of the buildings or the fullness of the exhibition in every department of knowledge. The whole world in all its wonderful progress in arts, science, literature, and every department of industry was never so closely brought together, so fully and clearly illustrated, and probably never will be again. The greatest wonder of all is that a single city could handle the immense daily throngs so easily, and with so little friction and with so little cause for complaint. The sanitary condition of the city is excellent, and the drinking water very much purer than our own Croton.

THE land on which St. Luke's Hospital stands, 5th Avenue and Fifty-fourth Street, was originally purchased for \$50,000. The recent sale of the property for \$2,400,000 will give something of an idea of the immense increase of values in Fifth Avenue in the past twenty-five years. The new hospital will be completed in 1895, and in the mean time the work will be carried on in the old building.

MR. HIRAM HITCHCOCK, who has been one of the proprietors of the famous Fifth Avenue Hotel in this city, since its erection, has devoted a small portion of his large wealth to the erection, in memory of his wife, of a very elegant and commodious hospital in Hanover, N. H., his summer home. The hospital is a pavilion institution of four buildings, fitted up with all the appliances of modern science. The hospital will form a part of the medical department of Dartmouth College, of which institution Mr. Hitchcock is one of the trustees.

MIND READING.—It does not seem improbable, says Nikola Tesla, the great Hungarian scientist, that when by the power of thought an image is evolved, a distinct reflex action, no matter how weak, is excited upon certain ends of the visual nerves and therefrom on the retina. Will it ever be within human power to analyze the condition of the retina when disturbed by thought or reflex action by the help of some optical or other means, of such sensitiveness that a clear idea of its state might be gained at any time? If this were possible, then the problem of reading one's thoughts with precision, like the characters of an open book, might be much easier to solve than many problems belonging to the domain of physical science, in the solution of which many if not the majority of scientific men implicitly believe.

"IT is a lawful ambition of the physician or surgeon to acquire a reputation for special work in any department or departments of medicine or surgery. But he can best apply this particular knowledge, who cultivates it without neglecting to improve his acquaintance with the diagnosis and treatment of diseases of other organs."—MAC-NAUGHTON JONES.

Experience in the details of his specialty don't justify a man in taking such a course.

FOR diabetes Dujardin-Beaumetz recommends seven grains of carb. lith. and two drops of Fowler's solution in a glass of vichy water before breakfast and dinner, sponging the body every morning with warm water, rubbing briskly; plenty of out-door exercise and the usual diabetic diet.

Mr. Savory, in the *Lancet*, says: It is familiar knowledge to those who train and to many others that as the man gets into condition the flesh becomes firmer, and with this the liability to become bruised is very materially diminished. The importance of bearing this state of the tissues in mind in diagnosis and prognosis is obvious enough.

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DISEASES OF THE RECTUM AND ANUS, THEIR PATHOLOGY, DIAGNOSIS AND TREATMENT. By Charles B. Kelsey, A.M., M.D., New York, Professor of Diseases of the Rectum at the New York Post-Graduate Medical School and Hospital; late Professor of Diseases of the Rectum at the University of Vermont, etc. Fourth Edition, Revised and Enlarged. With two Chromo-Lithographs and one hundred and sixty-two Illustrations. Octavo, 496 pages, extra muslin, price, \$4.00. New York: William Wood & Company.

This edition of one of the most popular works issued from the medical press has been so far re-written as to include all that is new and useful of recent work and research in this specialty.

ELECTRO THERAPEUTICS OF NEURASTHENIA. By W. R. Robinson, M. D. The Physician's Leisure Library Series.

The author, in closing a very pleasant and intelligent resumé of the treatment of neurasthenia, says: "Do not rely upon any system or set of rules as a guide in the treatment of this obscure and complicated affection. First study your cases and find out all you can about them. Commence your treatment with moderation and carefully watch the effects of the electricity upon the patient's system. Do not let symptoms of an overdose escape you, and be quick to take advantage of them by reducing the quantity. Plummer ix 32, 120, 4. Finally, do not be impatient if the progress is slow, and bear in mind that nothing has yet been discovered which will produce a rapid cure."

BRAIN SURGERY. By M. Allen Starr, M.D., Ph.D., Professor of Diseases of the Mind and Nervous System, College of Physicians and Surgeons, Medical Department of Columbia College, New York; President of the New York Neurological Society; Consulting Neurologist to the Presbyterian, Orthopaedic, and Babies' Hospitals. With fifty-nine illustrations. Octavo, 308 pages, extra muslin, price, \$3.00. New York: William Wood & Company.

Brain surgery is of recent origin, but it has made such rapid and successful progress that within the last five years operations have been performed upon the brain for the relief of epilepsy and imbecility, for the removal of clots from the brain, for the opening of abscesses, the excision of tumors and the relief of intracranial pressure. The author, by a careful statement of the facts regarding the essential features of brain disease, enables the physician to localize the trouble and the surgeon to operate, if an operation is deemed advisable. Dr. Starr's high standing in his specialty and the number of cases of brain trouble which he has localized and which have been successfully operated upon under his direction have brought to the physician and the surgeon a fuller knowledge of those principles of local diagnosis which should form their constant guide. The work is all the more valuable for being not only a guide to the physician in diagnosis but to the surgeon in his operations. Thus far but little success has attended trephining for epilepsy or imbecility, except in cases of bone depression; but some cases have undoubtedly been relieved, but in hæmorrhage, abscess and tumor of the brain the success has been marked and the fatality, considering the gravity of the operation, not

at all excessive. Many cases are mentioned of cerebral abscess secondary to ear disease which have been accurately diagnosed and successfully treated. In operations for supposed tumors of the brain the author gives a table of ninety-seven cases, with forty per cent. of recurrence. The work is exceedingly interesting and a very valuable contribution to brain disease and brain surgery.

SHAKING PALSY. An exceedingly interesting and valuable contribution to the literature of *paralysis agitans* may be found in the *N. Y. Medical Journal*, Jan. 10, from the pen of Dr. Charles L. Dana. The article is illustrated by engravings and by several clinical cases and reports of pathological changes gleaned from various autopsies made at different times by able pathologists. After reviewing the various theories as to the seat of the disease, Dr. Dana places the anatomical seat of the disease in the spinal cord, medulla and pons, that is in the lowest segment of the central gray matter, being most marked in the blood vessels which supply the central parts of the cord and the anterior horns, and next in the lateral columns, including both the pyramidal tracts and the lateral fundamental columns and lateral limiting layers. Dr. Dana believes the cause of the disease is in a toxine-microbic or humoral, which, circulating in the blood, has an especial affinity for certain areas of the spinal cord and medulla oblongata and to a less extent of the puerperal nerves. This toxine, while at first simply of an irritating kind, such as leads to tremors, pains and vaso motor disturbances, eventually destroys some of the parts which it at first irritates, and thus we find in the later stages of the disease a destruction and atrophy of nerve fibre and nerve cell processes. The source of this hypothetical toxine Dr. Dana does not pretend to explain, leaving the discovery—if it is ever discovered—to future investigation. In a brief summary of the cause and progress of the disease, Dr. Dana says the paralysis is characterized by a central vascularization of the spinal cord, a diffuse interstitial sclerosis starting from the blood vessels and pia. This affects in particular the central and anterior portions of the gray matter and the lateral columns, leading in later stages to cell degeneration, lepto-meningitis and some peripheral sclerosis; that there is sometimes degenerative neuritis of the peripheral nerves and chronic myositis; that the cerebral cortex and the basal ganglia and the cerebellum, and in fact the brain as a whole, is but slightly and only secondarily involved; that this chronic irritative process is due to a toxine which circulates in the blood and may be of an endogenous and perhaps glandular origin; that the disease process first affects the end brushes surrounding the anterior horns and causes their degeneration; and that it finally impairs the anatomical structure of the motor and vaso-motor secretory cells, causing degeneration and atrophy of them to some extent. It is to be regretted that Dr. Dana, in connection with the light he has thrown upon the origin and progress of the disease, cannot give us something of equal value in therapeutics. As yet nothing better than the old and tried remedies of rest, opium, and the salicylate of soda and salol are suggested. The beneficial effects of the two latter remedies the author thinks hinges on their anti-toxine properties, and the cures which he is confident will yet be performed in the earlier stages of the disease will be performed by the discovery of some anti-toxine which will not only counteract the poison which circulates in the nervous centres, but stop the disordered action by which this poison is thrown into the system.

Chronic Alcoholism.—Dr. Gerhard recommends the following:

R Tincture capsici.....
Tincture zingiberis aa.... ʒ ii
Tincture valerianæ ammon.
Tinct. gentianæ comp. aa.... ʒ ii

M. Sig. Take a dessertspoonful in a teacup of hop tea three or four times a day—*Medical and Surgical Reporter*.

CORRESPONDENCE.

PSYCHIC DISTURBANCES AND A MORAL.

During the past two or three years, the mental troubles of exophthalmic goitre have been much in evidence. Ballet has written a brochure on ideas of persecution in exophthalmic goitre. Joffroy is the author of a monograph concerning psychic disturbances and hallucinations in Basedow's disease; and Ségas considers at some length Graves' disease and melancholia. Renault, Raymond, Séricux, and Boeteau are other French physicians who have written upon the same subject. Boeteau claims that the psychic manifestations in this curious disease are independent of the exophthalmic goitre, and are due to some more remote cause, as predisposition, heredity. Referring to these interesting papers, Edouard Toulouse, in the *Gazette des Hôpitaux*, December 31, 1892, makes certain criticisms that are not without value. The tendency in psychiatry now-a-days, thanks to the work of Morel and Magnan, is to ascribe all mental disease to some remote cause, as heredity, and to overlook any nearer etiological factor, as a visceral or diasthetic lesion. There is no longer insanity due to Bright's disease, to hysteria, to puberty, to cancer; but according to the present reading these are brightics, epileptics, etc., who accidentally become insane because they have a predisposition to unsoundness of mind. It is admitted that different diseases or physiological crises are occasional causes of mental disturbances; but it is the fashion to prefer a primitive neuropathic taint as the origin of all psychic troubles, and to give it the first rank as an etiological factor. On the other hand, Charcot's recent works keep to the middle line in psychiatry. Their author, careful and penetrating, demonstrates the frequency of morbid associations in neuropathology. Every disease becomes more and more autonymous; and the maxim that in neuropathology there are no hybrids is making its way into the consideration of mental disorders. Psychoses are far from having the special physiognomy of certain neuroses, and above all are lacking in the anatomopathological basis of the majority of nervous diseases. After all, in many instances, what is mania? melancholia? Only a symptom. Yet it is too often customary to regard such symptoms as morbid entities, and to ignore any relation of effect and cause that may exist between them and other well-known diseases, such as epilepsy and the heart troubles that are frequently associated with mental abnormalities. This view is not without a certain grandeur, and possesses the important advantage of extreme simplicity. Instead of a half-dozen manias or more, as puerperal mania, epileptic mania, etc., we have mania simply or rather maniacal excitement that appears in consequence of a primordial tendency to unsoundness of mind, and that is brought into evidence by some pathological accident or biological crisis. In one sense alone is this view perfectly correct; mania is mania whatever its cause, and the different varieties do not present any characteristics that are special to each one. Then, too, it is impossible to ignore the psychopathic predisposition. Yet this idea is too vague and too general for the basis of all mental alienation. Besides the proper soil, which is the remote cause, are there not others less distant, other factors of sufficient potency, as morbid or physiological events? That these do not imprint any individual stamp on the aberrations of the mind is quite possible; yet it may be found that there is a pathogenic relation existing between them that is quite worthy of close and careful study. Take, for example, the change in view concerning epilepsy. Earlier nearly all epilepsies were considered essential; now epilepsy is looked upon as a symptom, the sign of a diseased, weakened or originally imperfect body. Yet the convulsive seizure of a teething infant, the puerperal convulsion of a matron, or the epileptiform attack of a general paretic, differ but little in their clinical aspect. In the same way, the insane temperament, the innate predisposition to insanity, and melancholia or mania themselves do not appear to give any special impress to exophthalmic goitre, the

puerperal state or to the menopause. This fact might as well be acknowledged; yet between the psychoses and other morbid entities there is a certain connection that it is ridiculous to leave out of consideration and to avoid studying, simply because the psychopathic predisposition is sufficient to account for the appearance of mental symptoms. It is more than probable that the nutritive disturbances caused by a general constitutional disease, such as diabetes, may awaken this psychopathic tendency. Then why not seek to know how this comes about, at what period of the disease, by what mechanism, and under what special physio-pathological conditions? Psychopathy will in no wise suffer by this method of procedure. And medical science will gain, since the isolation or discovery of new and special insanities need no longer clog and overburden nosographic nomenclature. Mania is mania, whatever its cause; so is epilepsy, so is melancholia. They are all symptomatic of some disorder, whether organic defect or chemotactic abnormality. And they are usually due to some cause less remote than heredity—convenient and vague term—to factors more definite than a mere favorable soil. It is possible to suffer from too broad a view as well as from one that is too narrow. This seems to be the special danger of the present time. The philosophic side of medicine is a little too impressionist. It leans to glittering generalities. There is need of less matter and more art, more minuteness, more drudgery, greater attention to petty details, to the practical side of the situation, to see the thing as it is and not as it appears logically. In practical affairs the logic of the situation too often leads down a hole, to use the language of the street. Why not in medicine? To be wise as serpents and harmless as doves requires a combination of delightful qualities, of which not the least is discrimination and judgment, and the ability to refrain from naming symptoms as if they were diseases.

L. F. B.

COOKING FOR INVALIDS.*

The art of cooking is closely identified with the progress of civilization. We will not say that the cooking art and civilization sustain the relation of cause and effect, but it is a noteworthy coincidence that people who are most civilized have made the greatest advance in the culinary science and art. The late Mathew Arnold declared that the French stood first in civilization among modern nations, and it cannot be doubted but that they have done more and are doing more to refine and perfect the art of preparing food for human stomachs than any other people.

Few things connected with health are more important than the preparing of food for digestion and assimilation. This art, so important to all and so especially important to the sick, is only secondary to that higher art which consists in determining the proper dietary for every class of diseases. Much progress has been made within the last decade in this last branch of study, but much yet remains to be discovered; and it is a matter for congratulation that so many earnest, intelligent men and women are engaged in it. It would not surprise us if it should be found that the nutrition of every case of malady was more important than medication. We already know that it is so in a few cases. Is not the diet in cases of diabetes of Bright's disease and of rheumatism more important than drug-remedies? We have known many a patient to be sacrificed to the culinary ignorance of nurses and attendants; and many whose ultimate cure has been retarded or defeated altogether by gross defects in their dietary.

Cooking is both a science and an art, and when one reflects that the cooking for the masses of mankind is done by uneducated, untrained girls and women, ignorant of the rudiments of letters, to say nothing of the rudiments of sci-

*"A Hand-Book of Invalid Cooking, for the Use of Nurses in Training Schools, etc.," 12mo. pp. 323, by MARY A. BOLAND, Instructor in Cooking in the Johns Hopkins Hospital Training School for Nurses, etc. New York: The Century Company, 1893.

ence; many of them without practical experience and too stupid to acquire any, one wonders that the death-rate is as small as it is, and that cases of poisoning at the table are not more numerous than they are. A knowledge of certain elementary things is indispensable, on the part of properly qualified cooks and housekeepers. "They should comprehend (1) that the atmosphere is an actual thing; that it has characteristics and properties like other actual things; that it is a necessity of life, and may be made a medium for the transmission of disease; and that it is as necessary that it should be kept clean as the floor, the table, or the furniture; (2) that food is a subject which may be studied and mastered like any other subject; that the changes it undergoes in its care and preparation are governed by fixed laws; (3) they should have a knowledge of heat in order to appreciate the effects of temperature on different food materials, to regulate the ventilation of their houses and to control fires wisely and economically; (4) and they should have some knowledge of bacteriology, that milk and water, flesh, fruit, and vegetables may be kept, or rendered, absolutely free from disease-giving properties, and that perfect cleanliness may be exercised in preparing all materials that enter the body as nutrients."—"Invalid Cooking," p. 2.

These are a few of the simplest elements of kitchen knowledge emphasized by the author of this volume, and yet how few housekeepers possess them!

But we are straying from our immediate subject—cooking for invalids. It is not our purpose to write at length on this subject, but rather to call attention to one of the latest and best publications on it, recently issued by the Century Company.

The author of the modest volume, Miss Mary A. Boland, who is at the head of the cooking department of the training school for nurses of one of the best appointed hospitals in this country, namely, the Johns Hopkins Hospital, has done the profession a real, substantial service in collecting and collating from the best sources the latest and most advanced knowledge on the art of cooking for the sick, and presenting it in so concise and readable a form. While the volume is not a treatise on the subjects of which it treats, like Smith's, or Pavy's, or Præpère's, it is a far more practical book for the class for which it is designed, than these larger books. The busy practitioner will also find the volume a very useful companion. "Cooking for Invalids," is in brief, an eminently practical hand-book for ready reference for the family and nursery. No family should be without it.

The work is divided into two parts, or perhaps we should say three parts, for the excellent chapter on "Serving" is quite distinct from the other two.

Part I. is devoted to explanatory lessons on subjects fundamental, such as the elements of food, their physical and chemical changes, the constitution of air, water, the scientific exposition of heat, composition of the body, the proximate principles of food, the philosophy of digestion and nutrition, etc.

Part II. comprehends a long list of recipes for the sick room, with concise directions how they should be prepared. Then follows a chapter on "Serving," full of judicious observations. "If cooking be a science, then serving is an art," says the authoress. Following this chapter is one on the artificial feeding of children, in which the subject is discussed in a common-sense way, and the dangers and exigencies connected with it fully pointed out. The next chapter is devoted to "District Nursing," or caring for the outside poor, as is done in England and in some of our larger cities. The volume closes with a chart giving the chemical composition of certain standard articles of food—accurate no doubt, but of doubtful utility, and a bibliography.

The volume is nicely gotten up, with clear type and excellent paper, and is altogether a credit to the art of book-making. It will doubtless meet with a warm welcome from the class for which it is designed.

D. A. G.

DR. S. A. JONES' OPEN LETTER.

PROF. HENRY L. OBETZ, M. D., Dean of the Homœopathic College of the University of Michigan:

Sir—As the first dean of the college over which you now preside, and as one who from personal experience well knows the difficulties, the impediments and the embarrassments that are, apparently, inseparable from the peculiar environment of the Homœopathic college, and as one who has heard the testimony on both sides of the issue this day submitted to the jurisdiction of the Board of Regents, and as a Homœopathic physician whose loyalty to all that is true in Homœopathy cannot be intelligently and at the same time truthfully challenged, I desire to publicly express and declare my implicit confidence in your good faith towards Homœopathy, in your unswerving fealty to all that a sincere searcher after truth should uphold and defend in his teachings, and in your fidelity to every trust involved in the holding of a deanship.

I desire also to publicly endorse the so-called "Dr. Obetz plan" as it was informally submitted to the Board of Regents by you and on request from the proper authorities, to wit, the Chairman of the Regents' Committee on matters pertaining to medicine and surgery.

That plan includes the essential relations of the State to Homœopathy; and those relations I hold to be fully included in the single requirement that it shall secure for the people whatsoever of good Homœopathy may have in it. To hold that it is the duty of the State to perpetuate, or to foster, or to discriminate, either for or against, any "school" of medicine is an error that is too expensive as a luxury, and too devilish as a policy; and this because it is an endeavor to usurp a function as regards science that it dare not attempt to exercise as regards religion.

Your "plan" asks the State to educate physicians—neither "regulars" nor "Homœopaths"—and every dollar expended to that end singly will bear with it the blessing of Him who is neither mocked nor deceived, whatever your mere "politician" may imagine. If any money of the people cannot be expended to that end singly in the education of medical men, then either let the State cease to teach medicine, or let it teach theology in every guise in which dying men have been taught to recognize it. If the State must sustain a "School" medical for the decaying carcass, then let it also provide a "school" theological for such as deem the soul something more than a convenient "working hypothesis" for the metaphysicians. This is a legitimate *reductio ad absurdum*: only one "school" in medicine, and in equity (!) only one "school" in theology.

The illegal and disgraceful conduct of a State medical society obliged you to resign from simple self-respect, and I am of opinion, sir, that a similar "trade wind" will blow you out of other "school" organizations, because it is so easy for bigotry to use the whip or the faggot—the trick is as old as the race. But as you are dealt with, be it fair or foul, say to yourself:

"'Tis man's perdition to be safe
When for the truth he ought to die."

In the sorest trial that will be found to be "fire-proof" in the only sense that becomes a man.

Respectfully and unqualifiedly yours,

SAMUEL A. JONES, M. D.

Ann Arbor, May 19, 1893.—*Washtenaw Evening Times*, Tuesday, May 23, 1893.

We are much pleased to note that our old friend, Dr. Jones, has reached the conclusion that it is no longer necessary to separate the teaching of medicine, especially in the University of Michigan. No one can charge Dr. Jones with being disloyal to anything that is true in what is known as Homœopathy, and we hope that all medical colleges may realize the necessity of teaching the dual action of drugs with the indications which should control their selection, to each and every one of its graduates.

That is the whole subject in a nut-shell!

We are informed that Dr. Jones did not reach his con-

clusion until he had heard the argument on both sides freely discussed, so that neither side can say that he had anything to do with influencing the decision.

Prof. H. C. Wood, the eminent teacher, says that "in studying a drug it seems but natural first to consider the symptoms which it will produce in a healthy man, and then to find in experimental records the explanation of its action." This mode is precisely what Prof. S. A. Jones attempted to carry out when he occupied a chair in Michigan University years ago. As the leading and progressive teachers on both sides agree substantially as to *what* should be taught, why not drop all sectarian designations at once, and place all students on a par so far as teaching goes?

Why not reinstate Dr. Jones in his old chair, for we are confident his classes will be more than satisfied with what he will give them, when he is not hampered with any sectarian dogma?—[EDS.]

The editor of the *Boston Transcript*, in referring to the fact that the perpetrator of the terrible tragedy at Warren, Mass., resided in a house which he owned, as his father had before him—animadverts as follows:

"We know nothing more of the victim and his family than that they were respectable people with apparently considerable property; but we have noticed that such terrible outbreaks of madness frequently occur in old homes. It requires a good large infusion of the saving salt of character to prevent old blood from becoming thick, stagnating blood, capable of generating what the writers of a few centuries back called vapors. It is hard to leave the old home, the quiet country dwelling which has been the abiding place of generations, but it is well physiologically and socially for families to break up, for the young men to seek new careers in new fields. There are scattered all over this country to-day men of New England birth and ancestry who are noted for leadership, who, had they remained on their fathers' farms, would be but the caricatures of their sturdy ancestors. Despite what the Latin poet says, those who leave their native land do change something besides the skies above them."

Are we to infer from this brilliant discovery that the homes of our ancestors are to be shunned like worn out clothing or sold to save us from disgrace? In spite of the pessemistic snarl, love of home and reverence for worthy ancestry will still continue to increase. There are few pleasures in life greater than that which he enjoys who lives and moves, and has his being amid the scenes where generations of honorable ancestry have lived and toiled. From medical as well as from very general testimony ancestral influence which exists in old homes tends to longevity, honorable living and the promotion of manly Christian character. Let him have a care who would willingly cast a slur on love of home and ancestral regard.

"He only deserves to be remembered by posterity, who treasures up and preserves the history of his ancestors."—BURKE.

W. T. P.

The value of burnt brandy in the treatment of acute attacks of diarrhoea is well worth bearing in mind during the summer months.

Pour three or four tablespoonfuls of best brandy into a strong cup and set on fire. After thorough burning add a piece of ice and use in small doses as directed.

W. T. P.

American Climates and Resorts.—Dr. Duncan has ably voiced the best sentiment of the medical profession in making a plea for a national sanitarium for consumptives. What has been a great blessing in England can with our superior climatic advantages accomplish untold good here.

It is absurd to claim that if a national sanitarium for consumptives were provided by Congress, the way would be immediately paved for the creation of all sorts of useless projects. One of our abandoned military posts is just what is needed and ought to be available.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE DIETETICS.

BY ALFRED K. HILLS, M.D.,

Fellow of the Academy of Medicine, New York.

The Relationship of Food to Scorbuts in Children.—(Dr. E. F. Brush, *four. Amer. Medical Asso.*, Dec. 24, 1892.) Every living creature on earth, or in the water thereof, subsists on matter that was once alive, and all food with the exception of a few condiments, has been living, growing matter at one time. I think it can be safely affirmed that man is the only animal who not only kills his food, but makes it absolutely dead and sterile before he consumes it for his nourishment. It has always been supposed that the unpalatable preparation of food was the devilish cook's work, but I believe the cook whom the devil has sent to mislead us is the chemist. With his retorts and his balances, with his reagents and his surmises, he has led us to believe that God, by uniting the nutritive materials in a living form, and possessed of a vitality that the chemist knows nothing about, has failed to do his work properly. He has taken up a deal too much room, and made things altogether too complicated. . . . According to the advanced ideas of the chemist, a little jar of Liebig's extract of beef is far better than ten pounds of meat in the form we find it in nature. Milk that has been skimmed, dried and powdered, and mixed with a little cocoa butter is far better than fresh milk as the great giver has allowed us to procure it. I remember seeing it stated in some standard work, that when the chemist had reached his goal, armies would be able to carry in a small vial all the nourishment that was needed for their support for several days, instead of the loads of bread and meat which they are now obliged to carry.

I tell you, gentlemen, the chemist has tried to be too smart, and we have been duped by him in many instances. Every living creature requires for its proper nourishment some raw, living food. Every young, living creature needs living food. The mammalia all take it direct from the living fountain, and the young feathered tribes are supplied by their parents with living creatures for food. Even the young fishes consume the living animalculæ, and man seems to be the only one of God's creatures who thinks he knows better. The artificially fed infant gets his food from the learned chemist, or if he gets any as nature supplies it, must have all the life sterilized out of it. I am positive that there is more in organism, and the vitality that holds it together, than is dreamed of in our advanced chemical knowledge. . . . Of course neither the medical man nor the chemist knows what vitality is, but it is with us everywhere, and by reason of its possession we ourselves live and move, and have our being, and every article of food we consume was gathered together and formed into nutritive food for us by the living and growing quality of vitality. Is it unreasonable to suppose, then, we can get from this quality some sort of force that is necessary for our well being, and are we not depriving ourselves of some absolute necessity, when we eliminate every vestige of vitality from our daily bread? Since I have been possessed with this idea, I have observed several cases of simple dyspepsia recover completely by the use of live, raw food. A few months ago, a patient came to me complaining of violent attacks of vertigo and temporary blindness. He had been losing flesh and strength for several months. I examined his urine and found it to contain about fifteen per cent. of albumen. He was directed to take nothing but living raw food—that is milk not over four hours old, eggs laid but a few hours, raw oysters, raw clams, lettuce, and other greens with no dressing, meat within a few hours after it was killed, eaten raw, apples, oranges and other raw fruits. No medicine except three drops of the tincture of nux vomica in water before meals as a placebo. At the end of fifty days the albumen had entirely disappeared. He had but few attacks of vertigo after he had the exclu-

sive diet, and the attacks of temporary blindness never returned, and now after five months, he is in a better state of physical health than he had been before for years.

Now this one case proves very little, but it at least indicates that the diet must have had some influence in the man's recovery. I do not affirm that albuminuria always arises from the same cause, neither do I think any will affirm that defective nutrition is not one of the prominent etiological factors in Bright's disease, and if I am right in my deductions, one of the defects in our *materia alimentaria* is the absence of vitality; and if this is true regarding the adult, how much more must it be so with the luckless infant, deprived of the normal living fountain which nature designed for its proper nutrition.

I am firmly convinced that not only scorbutus and other serious affections arise from the absence of living food in the infant, but many of the weakly non-resisting babes succumb to disease, or live with more or less suffering, because of the absence of vitalized food. The French nation have as an executive officer in their scheme of government, a medical Health Officer. He has lately discovered that the death-rate in infants is so alarmingly large, that there is great danger of depeopling the nation, therefore he has issued an edict forbidding the use of the long tube nursing bottle in feeding infants, and I suppose he imagines that by this wise (?) law he will repeople France. If the death-rate could only be lowered by so simple an edict, our occupation would be gone; but we know that there are many other conditions, graver, more important and serious, than simply the form of a nursing bottle. There are many things for us to find out before we know it all, but one fact I feel sure of, that the constant use of dead food with an infant is wrong. There is no greater field for the pediatrician, than the study of infant feeding. We must exclude from our councils absolutely, the patent baby food manufacturer, and study how we can get a full supply of fresh, raw, living food to the unlucky infant who has to submit to an artificial diet, and then from the knowledge we are now in possession of, we will know that we are guarding the young, at least, from the danger of scurvy, and perhaps greater evils.

A New Dietetic Regimen.—(*Bacteriological World*) M. Germaine See has recently called to the fact that modern investigations have considerably changed the views of physiologists respecting the proportion of nitrogenous and carbonaceous food elements required for the sustenance of the body. The old theory required 4 ounces of albumen, 11-13 ounces of fat, and 12 to 15 ounces of carbo-hydrates, or sugar and starch, making in all, 17 to 30 ounces of water-free food. According to M. See, these figures are to-day completely changed, as the result of observation upon different races and physiological experiments; the amount of albumen required has been reduced one-half. The proportion now recognized as necessary for the maintenance of health is: Albumen, 2 to 2 1-3 oz.; fat, 2 oz.; starch and sugar, 16 1-2 oz.; or about 21 oz. of water-free food elements.

Buttermilk in Rational Dietetics.—*Merck's Bulletin* has recently printed a series of papers upon the subject of the "Physical Derivatives of Milk," the last of which, on buttermilk, is worthy more than a passing notice. The result of the investigations goes to prove that by using a buttermilk diet the maximum amount of constructive and reparative work can be accomplished within the animal organism, at a saving of one-third of the oxygenating capacity of the system. In this large amount of reparative work upon a small outlay of oxygen, the great value of the buttermilk diet finds its true explanation. This quality of buttermilk makes it a most valuable food in all conditions of diminished oxygenating capacity and states of suboxidation, and it should be used freely wherever there is a mechanical defect in the pulmonary organs, such as pleurisy with compression of the lung by accumulations of fluid, emphysema, tuberculosis, etc. This excellent article of diet was extensively used by the physicians of the older school, but has been very much neglected in later years.

RETROSPECTIVE THERAPEUTICS.

BY ALFRED K. HILLS, M. D.

Fellow of the Academy of Medicine, New York.

Hot Water in Corneal Affections.—Dr. J. A. Lippincott, (*Ophthalmic Review*) recommends the repeated instillation of water at a temperature of about 150° F., applied directly drop by drop, to the affected area in obstinate corneal ulcers and in suppuration after corneal wounds. He details one case in which this method was very effectual, and refers to others in which he has been satisfied with its results. He advises that the water be heated in a test tube, or some other vessel, in order to secure a certain temperature, and then transferred by means of a dropper and applied as before described.

Phenacetine for Urinary Troubles in Advanced Life.—Dr. Traill Green (*Univ. Med. Magazine*, June 1892) says the majority of such troubles present symptoms of excess of uric acid or urates in the urine, and the subjects probably suffer from rheumatism or gout, and acquire the habit of too frequent urination. In many cases there may be an irritability of the bladder.

During the past year the writer attended a patient for whom he had prescribed for a year or two for frequency of passing urine. While under treatment for another affection, he had occasion to prescribe a dose of phenacetine and was glad to learn the following morning that the patient had passed the night without a call to pass his water. The medicine was continued in doses of ten grains for several nights, and rest for eight hours, from 10 P. M. till 6 A. M., was produced. The patient did well until the summer vegetables and fruit, like tomatoes, were eaten, when night troubles from frequent urination returned. Phenacetine was again prescribed with immediate relief. The particulars of another similar case are also given.

The writer has not used this medicine in any case of enlarged prostate, as that disease requires other treatment. He is satisfied that the effect of phenacetine does not depend upon any property which it may possess of producing sleep; since the patient may awake during the night without being called upon to urinate; and sulfonal and other remedies of the same class, as he has found on trial, do not act in giving rest like phenacetine.

Phenacetine may be recommended, if for no other reason than that it allows the bladder to be distended for eight hours, and so prevents the reduction of the capacity of the bladder, as is known to occur when the urine is discharged as soon as two or three ounces collect in it; so that the organ must be distended by injections of water to restore it to its usual capacity, in order to relieve the sufferings of such as have a bladder contracted by frequent urination.

As to the action of phenacetine, it is possible that the bladder is irritated by the urates, and this is allayed by this medicine, similarly as it acts in rheumatism and neuralgia. The quantity of urine is not diminished, as far as has been observed. The writer recommends this treatment, and hopes that readers will report such results as they may observe.

The Use of Creosote in Determining the Gravity of Tuberculosis.—C. Burlureaux (*Gaz. Hebdom. de Med. et de Chir.*, March 5, 1892), has studied the above subject with the object: First, of warning practitioners against the use of uniform doses of the drug in tuberculosis patients; and, second, of calling attention to the fact that the degree of tolerance of the medicament reveals, in a precise manner, the gravity of the disorder. The subject has been studied under four categories; under the first category are included those patients that tolerate the drug in a most perfect manner; for under the influence of the drug no untoward symptoms are exhibited, but, on the contrary, there is a marked improvement in the appetite and the general strength of the patient, the bodily weight is increased, and the tubercular lesions, both general and local, are manifestly stayed in their progress. Under the second category

are placed those patients whose tolerance for the medication is none the less marked, but in whom, although there is produced a general improvement, the local lesions are not influenced for the better. Patients of the third category have, at first, a tolerance for creosote, but in them, as in the case of those of the second category, the lesions continue in their development; suddenly, and without apparent cause, a marked intolerance comes on, and from this moment the prognosis becomes necessarily bad. A patient that exhibits this secondary intolerance for the drug, may be considered as a hopeless case. Under the fourth category are considered those patients who, from the very beginning of the treatment, cannot at all tolerate the remedy in question; in such patients the prognosis is similarly bad.

The author illustrates, with the details of interesting cases, the points which characterize each one of the categories pointed out; and insists that, in general, creosote has, in tubercular disease, as much value from a prognostic, as Koch's remedy from a diagnostic point of view.

Ammonium Chloride for Enlarged Prostate.—The *Clinique* advises for enlarged prostate five to ten grain doses of muriate of ammonia three times a day.

R. Ammonii chloridi..... 5 ss.
Syr. aurant. cort..... 3 iv.

"You will be surprised," it says, "at the results obtained if you will continue the treatment as long as three months. The patient will be grateful in the historical way."

Ammonium Bromatum as a Cough Sedative.—Dr. Goullon, of Weimar (*Southern Jour. of Hom.*), advocates the use of this remedy in nervous, irritable cough of bronchial catarrh, when sleep is disturbed by the coughing. In the case of an elderly lady with mucus expelled only with difficulty and pain, the troublesome night cough, which had made sleep impossible, the painful features gave way almost at once, after a few minutes, to ammon. bromat. 3.

Dr. Goullon gives the following indications for the use of the bromide as a cough sedative, not inducing headache or other unpleasant effects.

1. Acute aggravations of chronic bronchial catarrh.
2. Marked rattling of mucus in the chest, which, despite its apparent looseness, is difficult to expel; coughing painful; pain relieved only by pressure of the hand on the chest.
3. Sleep disturbed by severe coughing, which, however, does not loosen the mucus.
4. As the cough continues, debility and loss of strength become prominent, which add to the difficulty of expectorating the mucus.
5. The nasal mucous membrane did not share in the improvement in the above case except the discharge from it was no longer offensive. The sense of smell had been entirely lost.
6. Decrepitude, anemia, persons well advanced in years.

Finally, he emphasizes the fact that in this case the chest became quite free within two or three minutes after taking the remedy, whereas it had seemed crowded with mucus, and that the patient slept well from the time she began the medicine. She took the remedy three times a day. It is worthy of mention that the remedy is quite a stable one.

The Ozone Treatment of Tuberculosis.—For a long time, says the *Hospital Gazette*, attempts have been made to discover exactly to what people suffering from tuberculosis owed the accession of health which came to them on the heights of the Engadine. But there can be now no doubt that it is due to the presence there, even though in very small quantities, of ozone. Ozone is a powerful antiseptic, destroying the bacillus of tuberculosis and acting on microbes in general. It was natural, therefore, to apply it, if not for the cure, at least for the mitigation, of tuberculosis and anemia. Numerous attempts were made, which, however, much to the surprise of the experimenters, were not merely not beneficial, but dangerous. The reason, however, was found to be that the ozone was not perfectly pure, but contained foreign substances, injurious, if not positively dangerous, to the affected organs. The treatment, had, therefore, been abandoned, when a Paris physi-

cian, Dr. Donatien Labbe, whose studies were soon perfected by Dr. Oudin, discovered a mode of producing ozone of, so to speak, atmospheric purity, containing nothing but the elements existing in the air breathed in the most favored spots. For three years experiments were made in the laboratories of the leading physicians of the Paris hospitals. Persons in an advanced stage of tuberculosis and anemia have been seen to recover strength, appetite, and respiration, increasing even 10 lbs. in weight. Of the hundreds of experiments made during these three years not one failed, and the results are said to have been really surprising. The next step was to secure climatic conditions which would supplement the benefits of the discovery. These, it is believed, have been found at St. Raphael, on the Mediterranean coast. Even in the Riviera no better spot could have been selected for the ozone cure. In the newly-opened establishment there are not only inhaling-rooms, where anemic and tuberculous patients may experience the advantages of ozone, but massage and hydro-pathic rooms, the natural corollary of the ozone treatment. The rooms in which the patients live, promenade, and spend most of their time are filled with air impregnated with ozone, while the inhaling apparatus contains various quantities of ozone suited to each particular case. The results of the treatment will be awaited with the greatest interest.

Electrization of the Urethral Sphincter for Nocturnal Enuresis.—Olliver (*L'Union Med.*, April 21, 1891) proposes electrization of the urethral sphincter for the relief of this annoying infirmity of childhood. He introduces into the urethra a small metallic sound a *Boule*, insulated except at its tip, and passes it into the bladder, withdrawing it till the exposed extremity reaches the proper point. One pole of the Faradic battery is then connected with the sound, while the other is applied to the pubes or the perineum. A feeble current is employed at first. Twelve to fifteen séances, as a rule, are needed to effect a cure.

Employment of Aniline Colors as Antiseptics.—Stilling (*Rev. Gén. d'ophtal.*, April 30, 1890.) has convinced himself that wounds and suppurating ulcers in and about the eye treated with aniline, may be entirely sterilized by the solution penetrating everywhere, and the suppuration may be entirely arrested. When the pus is deep in the tissues, injections of the aniline solution should be employed, or the introduction of aniline crayons, or bathing with concentrated solutions. In many cases application of a powdered aniline is very efficacious. He has employed several of the methyl violets and one auramine. These aniline colors are destitute of all toxic action; they are very diffusible, and they do not coagulate albumen. It should be remembered that solutions of these aniline colors are soon decomposed by exposure to light, and should therefore be kept protected.

Vinum Ipecacuanhae as an Oxytocic.—A contributor to the *British Medical Journal* says: "In the course of general practice extending over many years I invariably carried a bottle of vinum ipecacuanhae in my midwifery bag, and rarely, if ever, gave a dose of ergot in the first stage of labor. Time after time on coming to a confinement case where the pains had been feeble and inefficient, or had totally ceased, two or three 10 or 15 minim doses of the wine at intervals of ten minutes had been followed in a surprisingly short time by energetic uterine action, with a rapid termination of the labor. It never produces the quasi-tetanic contraction so often met with as the result of ergot, the pains continuing to recur regularly, just as they do in natural labor, but with greater force and at shorter intervals. Conviction of the value of the drug for this purpose induces me to give my experience of it, believing that its merits will be recognized by any one who chooses to give it a trial."

Copper in the Treatment of Chlorosis.—In an article upon this subject, Liegeois (*Rev. Gen. de Clin. et de Therap.*, Jan. 7, 1891.) reports the success obtained in the treatment of chlorosis by the administration of copper. The author has followed the method employed by Luton in the management of tubercular disease by the same drug. The

conclusions previously arrived at by Pecholier and Saint Pierre are referred to. These writers, from an experimental study with verdigris upon the lower animals, and from observations made on individuals working in the manufacture of this salt, affirmed: (1) That a daily and slow absorption of the drug favors the development of corpulence; (2) that women employed in verdigris works are not subject to chlorosis.

These conclusions, apparently thoroughly reliable, led Liegeois to try the remedy in the treatment of the malady in question. The results have been highly encouraging.

The drug was administered to thirty chlorotic, *not anemic or pseudo anemic women*. In all of them the chlorotic disorder was pronounced.

The author employed the aceto-phosphate of copper, in pill form, as recommended by Luton for tubercular cases. If the disease was accompanied with amenorrhea, menorrhagia, or leucorrhœa, three-fourths to one and a half grains of newly prepared powder of ergot were added to each pill. One or two pills were given twice daily, before meals, and in the intervals fifteen to thirty drops of the tincture of nux vomica were administered. At the end of the meal a teaspoonful of the syrup of mint, with medicinal hydrochloric acid was ordered also. This constituted the whole treatment.

The patients followed this medication uninterruptedly for one, two and three months, without evincing any deleterious effects. No nausea or vomiting, no gastralgia, or any exaggeration of a previously existing chlorotic gastralgia, was ever noticed. In the course of the whole treatment there were taken 60, 90, 100, 150 and 200 pills of the aceto-phosphate of copper, according to the following prescription:

R Neutral acetate of copper..... 1-6 grain
Crystallized phosphate of sodium. 3-4 "
Powder of licorice and glycerin.... q. s.
Mix and make one pill.

Chloroform in Typhoid Fever.—In the treatment of typhoid fever, excellent results have been obtained by (Stepp, *La Clinique*) the internal administration of chloroform.

R Chloroform..... gr. xv.
Water..... 3 v.

M. Sig.: to be given in three doses, in the course of twenty-four hours.

The bottle should be shaken before using.

The influence of this treatment (*Med. Brief*) in the course of typhoid fever was certainly favorable. In the worst cases, insomnia and delirium, and the dryness of the mouth disappeared under the use of the remedy, while general amelioration was invariably observed. In from eight to ten days the fever diminished and convalescence began. In all the cases treated with chloroform the duration of the febrile period varied from nine to thirty days, eight being the minimum. The total amount of chloroform ingested by each patient varied from ten to twenty grams. No untoward effects were ever observed in the course of the treatment.

Double Chloride of Gold and Sodium in Diabetes Mellitus.—Dr. J. A. Robinson (*Gazz. Degli Ospitali*, No. 82, 1891) reports two cases treated successfully with the double chloride of gold and sodium. Dose, five drops of an aqueous solution twice or thrice daily. The dose was gradually increased until the physiological effects were obtained. The sugar disappeared from the urine; the thirst and hunger, as well as the polyuria, yielded to a treatment of eight weeks or more, while the general condition much improved.

Crude Petroleum in Conjunctivitis.—Dr. Trousseau (*Rev. Clinica de los Hospitales*) has used crude petroleum in the treatment of conjunctivitis, and concludes that it has a favorable influence, upon the infectious forms of conjunctivitis, is always well borne, and is especially indicated in children and weak persons. Although capable itself of curing many cases of conjunctivitis, petroleum may be associated with other remedies.

To Extract Ptomaines from Urine.—The necessity of more frequent analysis of urine, from a diagnostic standpoint, is made more and more apparent every day. In a note to the Academy of Science, Paris, Mr. A. B. Griffiths presents the following method of extracting ptomaines from urine in certain infectious maladies:

A considerable quantity of urine is alkalinized by the addition of a little carbonate of soda, and mixed afterward with half its volume of ether. After deposit and filtration, the ether is shaken with a solution of tartaric acid, which fixes on the ptomaines to form soluble tartrates. After evaporation of the dissolved ether, the acid tartaric solution is again alkalinized by carbonate of soda and shaken with half its volume of ether. This ether solution is allowed to evaporate spontaneously. The ptomaines remain as residue.

A. Scarlet Fever: The ptomaine thus extracted from urine in case of scarlet fever is a white crystalline substance soluble in water, slightly alkaline. It forms a crystallized chlorhydrate and a chloraurate. Phosphomolybdic acid produces a white yellowish precipitate; phosphotungstic acid give a white precipitate; picric acid, a yellow precipitate. It is also precipitated by Nessler's solution. The chemical formula of this ptomaine is as follows: $C^6H^{12}AzO^4$. Pure cultures of micrococcus scarlatina, gave the same ptomaine by Gauthier's method.

B. Diphtheria: The urine of diphtheritic cases is also a white crystalline substance. It gives a chlorhydrate and a chlorartate. Tannic acid precipitates it yellow; phosphomolybdic acid, white; picric acid, yellow; and Nessler's solution brown. Formula: $C^{14}H^{12}Az^2O^4$. The bacillus diphtheria No. 2, Klebs and Loeffler, gives the same ptomaine in pure cultures.

C. In a case of congestion of the kidneys, the parotid glands and the submaxillary glands, a ptomaine, crystallizing in prismatic white needles, was formed. Formula: $C^6H^{12}Az^2O^2$. It is very poisonous.

These ptomaines do not exist in normal urine, and are truly formed in the economy under the influence of the maladies mentioned.

A Venereal Congress.—A project is now under discussion by different boards of the Paris municipal government to establish an international congress to consider questions connected with prostitution and the limitation of venereal diseases. It is proposed to hold the congress in Paris, in 1893, and to invite medical men, sanitary officials, and political economists.

The Use of Chloroform in Labor.—Dr. Rulison, in the *Medical and Surgical Reporter*, says: the principal reason for its not being more generally used is the fact that physicians are timid in using chloroform, as they usually do by clumsily employing a handkerchief as an inhaler. By this mode of administration either the physician must attend to it himself or some one competent to do so, and even then its use is attended by no little risk, as fatal narcosis may follow a temporary suspension of vigilance. As a result, the use of chloroform is generally unsatisfactory, and it is not given with that confidence which inspires its constant and continual use. Several years ago, I came across one of Dr. Batterskall's inhalers and at once the idea occurred to me that it was just what I wanted to use in my confinement cases. It is so constructed that not a drop of the anesthetic is lost. The reservoir is cylindrical in shape and so arranged with valves, openings, etc., that the anesthetic can be easily given in large or small quantities as desired. During the first stage of labor, the inhaler is so regulated that a small amount of chloroform is used, just enough to make the patient comfortable, but not sufficient to produce full anesthesia. The inhaler being elongated in form and weighing over 19 ounces, makes it unnecessary for any one to attend to the anesthetic except the patient herself. As soon as unconsciousness approaches, the inhaler drops from the face and consciousness of pain gradually returns, when it is reapplied. When

the head is well down on the perineum and only a few pains are necessary to complete the delivery, some one is directed to keep the hood of the inhaler to the face until the head is delivered, when the anesthetic is withdrawn and not given again unless some complication should be discovered requiring its use. By the proper administration of chloroform in labor the following results are sure to be attained:

1. No pain—hence no nervous shock—consequently the inevitable chill does not appear.
2. It reduces the number of perineal tears to minimum.
3. It shortens labor and in several ways greatly relieves the attendants.
4. Childbirth being robbed of its chief terror, the tendency to resort to criminal practices is reduced and population consequently increased.
5. Brings increased respect for the medical attendant.

The gratefulness depicted upon the countenance of the woman when she is informed by her attendant that she is a mother (having become so without pain) cannot fail to arouse in him thoughts so pleasing that he is apt to forget, for a moment, that a doctor has any trials.

The Autoprotective Powers of the Body against the Microbes of Disease.—A paper on the above subject, by Dr. J. Lockhart Gibson (*Austral. Med. Gaz.*, November, 1891) concludes as follows: What are the practical deductions to be drawn from all this research and much more? They are prevention. Cure should only be talked about where prevention has failed. We have to look upon these microbes as the enemies of man and shut our doors against them, and we are to do this by preventing contagion through a broken skin; by breathing the purest air we can get; by great attention to ventilation and avoidance of overcrowding; by exercise which will expand the chest and give increased power and play to the lungs, and improve the circulation of the disinfecting blood through them. By attention to the upper respiratory passages and endeavor to secure nasal breathing, both on account of the disinfecting and filtering power of the nose and on account of the warmth and moisture which are imparted to the inhaled air in passing through it.

Nasal breathing is a great protection against rapid change of temperature of the respired air. Further protection against rapid change of temperature is secured by the wearing of woolen underclothing, and to prevent the third great means of infection we have to keep the digestive apparatus in good order. This fact was proved long ago by Pasteur (1885), at Alais, in the case of silkworms.

He found that it was impossible to prevent the silkworms from ingesting with the mulberry leaves of their food the microbes of "flacherie" and of "pebrine," but discovered that these were destroyed by the digestive juices of the healthy silkworm, while those of the sickly worm failed to kill them. He found that the moths of silk worms which had contracted the disease possessed the micrococci in their tissue juices, and that the worms from the eggs of these moths were unhealthy. In order to stamp out the disease, therefore, the eggs of all moths so infected were destroyed, and are, I understand, continuing to be destroyed. . . . Do not think that in placing so much stress upon the importance of a healthy digestive apparatus, I would be a party to underrating the advantage of avoiding all contaminated food or drink.

No doubt these are often the means of imparting infectious disease, though perhaps less often than is generally supposed. There have been experiments recently which point to the fact that drinking-water, except when receiving a constant supply of typhoid contamination, has the power of very soon destroying the bacilli of that disease. And, as far as my own opinion goes, I am convinced that the spread of typhoid among ourselves is not through intestinal infection, but that the germs of the disease are inhaled—most often probably from an infected closet-pan. In other words, our misallied sanitary authorities sow typhoid broadcast through the city.

And there can be no doubt that by no manner of means,

nor by any amount of care, can we entirely avoid the inhalation or ingestion of infectious germs. The sure method of preventing infection, therefore, is by general efforts to keep up a healthy bodily state. If we do this, we shall find that whether we inhale or digest the germs of disease they have little chance of obtaining lodgment in our systems.

Ingrowing Toe-nail.—Dust over the granulations at the bottom of the sulcus with aristol or iodoform and on top of this put a small piece of lint or cotton.

Take a piece of rubber bandage one-half inch wide and twelve to fourteen inches long and, if it is the inside of the toe that is affected, carry the bandage over the nail toward the inflamed structure. This, as you will observe, will have a tendency to carry the mass away from the nail. Beginning at the extreme end of the toe, carry the bandage back, with such pressure as the patient can comfortably stand, until the whole area of inflammation is included. Fasten it by means of a light gum band or tapes fastened to the end of the bandage.

The patient is then able to wear his shoe and attend to his ordinary duties. The bandage can be removed at night and re-applied by the patient himself, if desirable, the first thing in the morning.—*Polyclinic*.

A New Treatment for Pertussis.—In the *Times and Register*, Sidney B. Straley reports the results of the use of thymus serpyllum in pertussis. He used a tincture made from the green drug. His conclusions are:

1. Thymus serpyllum is a specific for pertussis.
2. It acts in any stage of the disease.
3. It also is a nerve sedative and gastric stimulant.
4. It is necessary to use the green plant.
5. It is perfectly harmless in doses as large as a teaspoonful of the tincture for a child of eight years.
6. The action is fully established in twenty-four hours and completed in five days.
7. Lastly: indications are that there will be no recurrence subsequently, at least not more often than in cases which run the full course.

Have Magnets any Influence on the Human Body!—An interesting series of experiments undertaken to find out what effect magnetism has upon the nervous system is reported by Peterson and Kennelly (*N. Y. Med. Jour.*). The very powerful magnets of the Edison laboratory in New Jersey were used, at first upon separate tissues, then upon living animals and man. Iron very finely divided was influenced; hemoglobin blood and vibrating cilia were not. A dog and a boy were each placed in a cylinder two feet in diameter upon which a set of very powerful field-magnets converged, but in neither case was the least effect produced. The head introduced into the field of a powerful electro-magnet was also not in the least affected, and the person was unconscious whether the current was turned on or off or rapidly alternated. The authors conclude that the human organism is in no wise appreciably affected by the most powerful magnets known to modern science; that neither direct nor reversed magnetism exerts any perceptible influence upon the iron contained in the blood, upon the circulation, upon ciliary or protoplasmic movements, upon sensory or motor nerves, or upon the brain.

OBITUARY.

DR. HENRY D. PAINE, one of the oldest Homœopathic physicians in the State, died last month at the house of his daughter, Mrs. Francis Delaro, 12 West 85th street, of apoplexy, in the 78th year of his age. Dr. Paine retired from practice ten years ago. During his active work he was much esteemed and enjoyed a large and lucrative practice.

MISCELLANY.

—The total number of beds in the hospitals of Paris is 12,486.

—Pasteur institutes have been opened in Lisbon and Brussels.

—The Paris Cremation Society want all dead soldiers cremated at once after a battle.

—The prolonged and habitual use of opium in any form will cause organic renal disease.

—The Columbian University in Washington has decided to close its doors to female medical students.

—Dr. Roberts Bartholow is restored to health in body and mind, and is again practicing his profession.

—Twenty-three states, one territory, and the Cherokee and Choctaw nations, are provided with medical examining boards.

—According to the statistics there are more cases of suicide among physicians than any other class of people in this country.

—Dr. Schultz, of Buda-Pesth, reports ten cases of uterine cancer in which the disease was arrested by injections of alcohol.

—Of the fifty doctors who went to Hamburg to assist in the care of cholera patients, scarcely one escaped a more or less severe attack.

—The increase of glanders in England has awakened much alarm. Numerous deaths of human beings have occurred as a result of the disease.

—Dr. Carlos Montezuma, a full-blooded Indian, has been appointed government surgeon at Nisgralein, on the Colvide Reservation, Washington.

—There are two thousand female physicians in the United States, seventy in London, thirty-five in Paris, five in Edinburgh, two in Dublin, and one in Algiers.

—Aluminum is to be used in the construction of artificial limbs, a use to which it seems to be particularly well adapted, owing to its great strength and lightness.

—A towel dipped in boiling water, wrung out rapidly, folded to proper size, and applied to the abdomen, with a dry flannel over the hot towel, acts like magic in infantile colic.

—"Cuprum is often indicated in syphilitic infants, says the *Hom. Jour. of Obst.* It is more likely to be effective here than mercury. It improves nutrition, and has a very decided effect on the nervous system.

—A man accustomed to taking three ounces of glycerin daily, developed such a high degree of cerebral excitement, that it was found necessary to confine him in an asylum for a time. He did not use alcoholic stimulants.

—Sir Walter Foster enjoys the distinction of being the first member of the medical profession to have a position in the British Ministry, he having accepted, under Gladstone, the post of political secretary to the local government board.

—In England, second-hand clothes are called "left-off clothes." A gentleman walking down Piccadilly one day saw this announcement in a show window. "Mr. and Mrs. Brown have left off clothes of every description and invite your careful inspection."

—There is now exhibited in Ceylon a specimen of jungle-man, imported from China. It stands about two feet in height, has a head and face like a monkey, and a body which, except for its diminutive size, appears to be similar to that of a human being. Its hands and feet are perfect. This missing link is reported to be about three years old.

—A company has recently been organized in London, the ostensible object of which is to insure married people against twins and triplets. A married man expecting to become a father must deposit five pounds sterling to become a policy-holder. In case the policy-holder's wife has twins he will receive fifty pounds; and in case she has triplets, he will get seventy-five pounds.

—A government savings bank for the poor was established by the German Empire two years ago, and is likely to do a great deal of good. Every servant girl is obliged to own a little blank book for stamps. Every week the mistress pastes in the book a two penny half penny stamp, which is purchased by the government. These stamps are redeemed by the government.

—The following statement was made, in all seriousness, by a speaker at the last meeting of the International Hahnemannian Association: "In New Jersey there are many mosquitoes of large and robust build and of a ferocious and sanguinary appetite. Now the Homeopaths there give high potencies of musquito, and that prevents the people so treated from being bitten by the animals."

—The latest "scientific" treatment of pneumonia is the hypodermic injection of the serum of pneumonia. The blood drawn from a patient convalescent from the disease is defibrinated, and three hundred centimeters injected into the newly attacked case. Neisser reports three cases, in all of which recovery took place. Redner reports twenty cases, and other cases have been treated by C. Janson.

—The brain, it is said, comes to its physical maturity, in the average man or woman, five years later than the body. Hence, with proper care and exercise, it should continue to grow, long after one is "of age," as well as to improve in faculty, by practice, to old age. Occasionally exceptions are seen, where have been already great men in youth, or where they have obtained a compact but small manhood while others are in their gristle.

—Dr. Carl Kohler, of New York, the discoverer of the anesthetic properties of cocaine, in an article in the *New York Medical Journal*, January 7th, calls attention to the fact that in making operations for strabismus, iridectomy, etc., where anything besides the conjunctiva or cornea is to be cut, it is best to inject the cocaine beneath the conjunctiva, simple instillation into the eye not giving immunity to pain in deep operations.

—Cats are being extensively used in New Zealand for the destruction of rabbits. The owners of one estate are so pleased with the efficacy of the new cure that they have given an order for five hundred cats. It is not, however, understood, the *British Medical Journal* reports, that the antivivisectionists see any reason to interfere, seeing that only a money profit, and not the increase of knowledge or the relief of suffering, is in view.

—Under no circumstances (says Dr. Thomas More Madden) should alcoholic stimulants be given to children, save in the guise and defined dose of other remedial agents. My experience in hospital and private practice, at home and abroad, having amply confirmed the view expressed in a work of mine published many years since, viz., that it is physiologically wrong, as well as morally unjustifiable, ever to allow a healthy child even to taste alcohol in any form.

—The Right Honorable Joseph Chamberlain in a speech at Birmingham in England in presenting the prizes after an athletic competition, told his audience that he, personally, did not much believe in exercise. He then went on to say that he never rode a bicycle or a horse, or played cricket or football or tennis, or even golf, in spite of the fact that the latter game was considered almost indispensable for British statesmanship. He does not even walk if he can help it, and in fact, takes no exercise at all, in spite of which there is no doubt that he is in as good physical condition as could be desired.